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Towards Equity

Towards Equity

Proceedings of a Colloquium on the Economic Status of Women in the Labour Market, November 1984

A collection of papers presented at a colloquium sponsored by the Economic Council of Canada. Although this volume is published under the auspices of the Council, the views expressed herein are those of the authors and, as such, have not been endorsed by Members of the Economic Council of Canada.

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Foreword

Over the last 20 or 30 years, women have been entering the labour market in ever increasing numbers, seeking a better life for themselves and their families. This movement may turn out to be the most striking feature of labour market development in Canada during that period. As part of that trend, the participation rate of women with preschool and school-age children has grown significantly. Moreover, the number of women opting for a career requiring postsecondary education has grown dramatically. In medicine, law, business, public administration, and computer programming, to name but a few fields, the increase in female representation has been unmistakable.

Despite these advances, women still face certain economic obstacles in the labour market. The rate of economic growth in coming years will likely be slower than it was over the past few decades, and so the question arises whether the female participation rate will continue to grow and whether women will continue to break down the barriers to nontraditional occupations.

Compared with other disciplines, economic science has not paid much attention to the various issues raised by the increased involvement of women in Canadian economic life. In deciding to investigate this issue, the Economic Council sought to establish a solid research base in this area to aid both its own studies and those of other individuals and agencies. The objectives of this effort were as follows:

- to describe the main aspects of the changing participation of women in the labour market;
- to identify those occupations where women have made the greatest and the least progress;
- to analyse the conditions that led to such gains and losses; and
- to propose, on the basis of its results, measures and policies to promote equal economic opportunity for women.

In line with these objectives, the Council set up a small research program on the role of women in the economy and established an advisory committee to guide its research. The Colloquium that led to this Compendium was part of this effort. The various papers presented herein were delivered to a group of some 100 specialists who met in Montreal between November 26 and 28, 1984.

In our view, the issue of the economic status of women is one of both great complexity and great importance. It is important because the barriers faced by women as they attempt to exploit fully their skills and abilities in the quest for financial self-sufficiency do not simply penalize women alone: society as a whole is affected. The elimination of obstacles preventing women from enjoying the same opportunities as men in educational institutions, in the labour market, and in regard to promotion and pay can only work to the benefit of all Canadians. However, good intentions alone will not enable us to achieve such a goal; it can be reached only through sound research aimed at devising effective policies and programs.

The problem is also complex, because no single scientific discipline can claim to possess all the analytical tools necessary to develop comprehensive solutions. That is why this Colloquium called upon people from many walks of life, from many backgrounds, and from many different regions.

I would like to take this opportunity to congratulate our two chairpersons, Professors Muriel Armstrong, of Concordia University, and Jeannine David-McNeil, of the École des hautes études commerciales, on their grasp of the complexity and significance of the issues that inspired the idea of a Colloquium.

We believe that meetings such as this one serve a useful purpose. First of all, it is an opportunity for people whose opinions and expertise in the field are a matter of record to get together and share their respective viewpoints and stimulate their intellectual interest. Moreover, by making copies of the papers available to participants in advance, we made sure that everyone had enough time to prepare detailed comments and questions. And given that the main focus of the Colloquium was on methods to improve the economic status of women as quickly as possible, rather than on the methodological or analytical aspects of the problem, we are convinced that the Colloquium, as well as its resulting Compendium, will produce tangible results.

The topics discussed at the Colloquium were selected as being of particular interest. The list is by no means exhaustive, and the Compendium's chapter on directions for future research is devoted to a discussion of other issues that will require special attention in the future. It should be noted that some speakers at the Colloquium deviated somewhat from their original, written presentations. Consequently, summaries of Colloquium floor discussions provided in the Compendium occasionally refer to topics not mentioned in the accompanying texts.

In closing, let me state that the Colloquium and this Compendium have been strongly supported by the Economic Council of Canada. As is the case with all studies published by the Council, the Council does not clear for publication or control individual papers. Thus the authors retain full responsibility for their papers.

David W. Slater
Chairman
Economic Council of Canada

Towards Equity

1 The Changing Economic Status of the Female Labour Force in Canada

Presentation by Jeannine David-McNeil

I consider it both an honour and a pleasure to be asked to present the first chapter at this Colloquium, organized by the Economic Council of Canada.

Since the year 1984 marks the end of the decade dedicated to women, the Colloquium represents an appropriate moment to reflect on the changes in the economic status of Canadian women. Certain events, such as the Byrd Commission Report and the International Women's Year, have succeeded in focusing public attention on the swift "invasion" of women into the labour market, and also in bringing Canadian workers, unions, businesses, and governments face to face with the reality of the increasing "feminization" of the Canadian labour market. While these events have not been the only ones to increase public awareness of such issues, they have managed to reach groups unlikely to be swayed by feminist rhetoric.

It seems timely today to ask whether the increasing feminization of the labour market has been a factor in improving the economic status of Canadian women. There is no doubt that an assessment of the economic status of the female labour force on the basis of economic data alone, without taking into account the sociological and legal aspects of the issue, gives but a partial picture of the true state of affairs. It nevertheless constitutes a convenient starting point for discussion. Papers to be presented at this Colloquium will round out the economic analysis of the status of the female labour force in Canada by setting out the views of administrators, legal experts, and sociologists.

As an introduction to this Colloquium, I propose to trace a retrospective and prospective picture of the place of the female labour force in the Canadian economy. I will be examining the size of the female labour force in Canada, the principal features of female employment, and whether the economic status of working women in Canada has improved or declined since 1970.

In each case, the discussion will be based on the major features of change in the past and on factors most likely to play a role in future trends. For those among us who are unfamiliar with the subject, the analysis should help place in perspective the problems faced by working women; it should also give the experts an opportunity to define the direction of future discussion.

Labour Market Participation of Canadian Women: A Retrospective

Since 1960, women have steadily been taking a more active role in the labour market. If this phenomenon continues at the present rate, by the year 2000 it is expected that almost one in every two workers will be a woman, compared with one in five as of 1950. At the present time, women account for a little over 40 per cent of the Canadian labour force.

It is clear that the main reason behind this significant increase in the female labour supply is the new role of married women with respect to paid work. Their participation rate has increased fivefold in just 30 years, from 11 to 50 per cent. Over the same period of time, the participation rate doubled for Canadian women as a whole, rising from 24 per cent in 1951 to 53 per cent in 1981. According to projections to the year 2000, by that time two out of every three women will be a member of the labour force, reducing the gap between female and male participation rates to less than 15 percentage points.

Thirty years ago, 40 per cent of women in the labour force were under 25 years of age, since at that time it was customary for a woman to stop working once she married or had her first child. In 1981, 70 per cent of working women were aged 25 and over, thanks mainly to the massive influx of married women that reduced the percentage representation of the group aged 15 to 24 and increased the share of the group aged 25 and over.

The following reasons have prompted women to participate in the labour market on a more permanent basis: the increased job opportunities for women as a result of growth in the service and government sectors; the greater forgone earnings to be recouped by women who delayed their labour market entry in favour of pursuing higher education; the increasing contribution of women to household income; and the wider recognition of the economic advantages of women's financial self-sufficiency.

Table 1-1

Female Labour Force in Canada, 1951-2000

					2000	
	1951	1961	1971	1981	Low projection	High projection
				(Thousands)		
Female labour force	1,167	1,780	3,053	4,938	7,321	7,870
				(Per cent)		
Share of total labour force	22.0	27.4	34.7	40.9	47.0	49.0

SOURCE For the years 1951-81, Statistics Canada, *Census of Canada*, various years; for the year 2000, Dan Ciuriak and Harvey Sims, "Participation Rate and Labour Force Growth in Canada," Department of Finance, Ottawa, April 1980, Table 17.

Labour market studies are unanimous in forecasting a constant growth in the percentage representation of women within the labour force between 1980 and 2000 as the female labour market participation rate continues its steady climb. Women now aged 25 to 34 will probably continue to work as they grow older, sending sharply upward the participation rates of women in the 35-50 age group. The federal Department of Finance estimates that between 1980 and 1990 the female labour force in Canada will grow by 1,750,000 individuals, an average yearly increase of 4.3 per cent. According to these estimates, women will account for 45 per cent of the labour force by 1990 and 49 per cent by the year 2000.

It must not be forgotten that work outside the household for married women very often involves holding what is essentially two separate jobs. Policies are needed to assist their access to the labour market and to allow them to devote as much time as necessary to gainful employment. We will shortly look at two issues in this area that are of crucial importance to women: daycare and parental leave. As necessary as such policies are, by themselves they are not sufficient to ensure that working women can participate in the labour market as freely as men, unencumbered by domestic responsibilities.

How will society adjust to the new reality of the two-career household? Numerous economic, sociological, and psychological changes will be required before every individual, regardless of sex, is able to participate freely and easily in the labour market. In order to encourage such economic and social changes, many government and private sector policies will have to be rethought. Among the measures that must be implemented are training programs designed to meet the needs of two-career households. Fiscal policies must be reshaped to encourage, rather than discourage, the labour market participation of both spouses. Business hours of public and private services should be extended so

Table 1-2

Female Labour Force Participation Rates, by Family Status, Canada, 1951-2000

					2000[1]	
	1951	1961	1971	1981	Low projection	High projection
				(Per cent)		
Family status:						
Married	11.2	22.1	37.0	49.8	..	..
Single	58.4	54.9	53.5	65.7	..	..
Widowed, divorced, or separated	19.3	23.1	28.6	32.0	..	..
Total	24.1	29.7	39.9	52.8	65.3	70.6

[1] Women aged 20 and over.

SOURCE For the years 1951-81, Statistics Canada, *Census of Canada*, various years; for the year 2000, Dan Ciuriak and Harvey Sims, "Participation Rate and Labour Force Growth in Canada," Department of Finance, Ottawa, April 1980, Table 16.

that a family's financial, educational, and household business can be conducted outside standard working hours. Human resource management policies must make special allowances for men and women who are at the age when family responsibilities are most heavy and time-consuming.

Table 1-3

Distribution of the Female Labour Force, by Age, Canada, 1951-81

	1951	1961	1971	1981
		(Per cent)		
Age:				
15 - 24	39.2	30.1	32.0	29.8
25 - 34	23.0	20.3	20.8	28.0
35 and over	37.8	49.6	47.2	42.2
Total	100.0	100.0	100.0	100.0

SOURCE Statistics Canada, *Census of Canada, 1971* and *1981.*

This Colloquium represents an excellent opportunity to identify and put forward policies that will encourage the changes required for the rapid adjustment of society to the realities of the feminization of the labour market.

Characteristics of Women's Jobs

A good deal of literature has appeared in recent years on the subject of women's labour market participation. Some studies and certain articles give the impression that most of a woman's problems end the moment she finds a job. Knowing as we do that working conditions can vary widely from one job to another, it is perhaps wise to discuss some specific characteristics of jobs held by women. Here we are concerned primarily with occupational structure, job status (full-time or part-time), and job security.

Occupational Structure

The distribution of the female labour force by industry and occupation has largely been shaped by general economic trends since the end of the Second World War: declining farm employment, the job explosion in the service industries, and moderate growth in the manufacturing sector. Three working women out of four are employed in the service industries, and 44 per cent of these work in the fields of community, business, and personal services. This kind of market concentration puts working women in competition with each other and has the effect of reducing their wages and increasing the risk of female unemployment.

Table 1-4

Distribution of the Female Labour Force, by Industry, Canada, 1961-81

	1961	1971	1981
		(Per cent)	
Industry:			
Agriculture	4.5	3.8	2.9
Other primary industries	0.2	0.2	0.2
Manufacturing	17.0	13.7	13.3
Construction	0.6	0.9	1.4
Transportation, communication, and other utilities	4.7	3.9	4.4
Trade	17.2	15.7	18.0
Finance, insurance, and real estate	5.9	6.2	7.9
Community, business, and personal services	42.5	39.7	44.1
Public administration	4.9	5.5	6.2
Unclassified	2.4	10.2	1.0
Total	100.0	100.0	100.0
		(Thousands)	
Number of female participants	1,766	2,961	4,811

SOURCE For the years 1961 and 1971, Statistics Canada, *Census of Canada, 1961* and *1971;* for the year 1981, Statistics Canada, *The Labour Force,* Cat. 71-001, December 1981.

Looking at the relative size of the female component in the various industries (referred to as the "feminization rate"), we can see remarkable changes taking place in response to a rapidly expanding female labour supply. The representation of women has grown in all industries, even in the service sector where they were already numerically dominant. Overall the feminization rate rose from 27.4 per cent in 1961 to 40.9 per cent in 1981. However, despite some progress in the construction, transportation, and public sectors, some traditionally female industries have more and more become women's "ghettos." Indeed, over 60 per cent of jobs in the financial and service industries are occupied by women.

In the case of farming, the rise in the feminization rate from 12 to 27 per cent can be explained by the fact that members of farming families are now recognized as workers.

Changes in the occupational structure of female jobs is a slow process, mainly because in both the labour market and educational institutions women still tend to select traditionally female fields. Jac-André

Table 1-5

Feminization Rates, by Industry, Canada, 1961-81

	1961	1971	1981
		(Per cent)	
Industry:			
Agriculture	12.4	23.2	27.6
Manufacturing	21.5	23.7	27.8
Construction	2.5	4.9	8.9
Transportation, communication, and other utilities	13.6	16.8	22.5
Trade	30.4	36.7	43.2
Finance, insurance, and real estate	45.7	51.5	61.4
Community, business, and personal services	59.1	57.6	61.1
Public administration	18.2	25.8	36.8
All sectors	27.4	34.7	40.9

SOURCE For the years 1961 and 1971, Statistics Canada, *Census of Canada, 1971*, vol. 3, Part IV, Table 1; for the year 1981, Statistics Canada, *The Labour Force*, Cat. 71-001, December 1981.

Boulet and Jane Gaskell will be examining the main points – past, present, and future – of the occupational structure and educational orientation of the female labour force and will discuss various measures that can be taken to encourage occupational diversification. These measures are of primary importance and will play a vital role in improving the economic status of women in Canada. Governments must therefore be lobbied to accord them priority status in their policy programs, since any economic and social progress in this area will be based upon occupational diversification in the female labour force.

Job Status

Another characteristic of the female employment structure is the relatively high number of women working part-time.

Part-time work is an inescapable reality in the economy of the 1980s, and this is more often the case for women than for men. In 1981, 72 per cent of Canadians working part-time were women, and 24 per cent of jobs held by women were part-time versus only 7 per cent of men's jobs. This type of employment could easily be considered another women's "ghetto."

Why do women work part-time? While just under 20 per cent are working part-time because full-time jobs could not be found, it would appear that some 80 per cent take part-time work either by choice or for family or personal reasons. For many working women, a major advantage of part-time employment is that it allows more time to be spent with children and family. Full-time work can be quite a burden for a mother with two or three children, and it can be difficult to reconcile with domestic responsibilities.

Table 1-6

Distribution of People Working Part-Time, by Reason Given, Canada, 1975 and 1981

	1975	1981
	(Per cent)	
Women:		
Personal or family responsibilities	16.9	16.7
Going to school	22.8	20.0
Could only find part-time work	10.8	17.3
Did not want full-time work	45.9	43.0
Other reasons	3.6	3.0
Total	100.0	100.0
	(Thousands)	
Number of women surveyed	687	1,064
	(Per cent)	
Proportion of women among part-time workers	69.5	72.0
Proportion of part-time workers among female workers	20.3	23.6
Men:		
Personal or family responsibilities	1.3	0.9
Going to school	62.1	55.4
Could only find part-time work	11.3	20.0
Did not want full-time work	16.3	16.2
Other reasons	9.0	7.5
Total	100.0	100.0
	(Thousands)	
Number of men surveyed	301	413
	(Per cent)	
Proportion of men among part-time workers	30.5	28.0
Proportion of part-time workers among male workers	5.1	6.8

SOURCE Statistics Canada, *The Labour Force*, Cat. 71-001, December 1981.

On the other hand, the advantages of part-time employment in terms of more time for children and family are offset by a multitude of disadvantages: low wages, little chance of union representation, and poor fringe benefits. Given the present economic context, part-time work merely perpetuates the marginal status of many working women, with low wages and little job security. Technological change threatens to maintain or even increase the percentage of women's jobs that are part-time.

In 1983, the Commission of Inquiry into Part-Time Work proposed several measures for improving the lot of part-time workers and thus indirectly conditions for the female labour force. Among these were recommendations concerning fair wage levels, prorating of all fringe benefits and pension plans, guarantee of the same rights and benefits granted full-time employees, and so on. According to the Commission, part-time work must be recognized as a "necessary component" of the labour market. Given equitable wages, it would become a viable alternative for all workers and could even be considered "part of an overall strategy designed to give workers more flexibility in planning their work and home responsibilities."

Job Security

It is quite normal for the female unemployment rate to change in response to prevailing economic conditions, just as the male rate does. In the medium and long terms, unemployment rates are a reflection of general economic problems. Over the last 30 years, as shown in Table 1-7, the general trend has been towards higher unemployment rates for both men and women. It is true that the labour supply grew extremely quickly during the period, spurred on by growing female participation, among other factors. But this is not the reason behind high unemployment; it is simply another way of describing the same situation.

Table 1-7

Unemployment Rate, by Sex, Canada, 1951-83

	1951	1961	1971	1981	1983
			(Per cent)		
Men	1.5	4.2	7.0	7.1	12.1
Women	1.2	2.9	5.1	8.3	11.6
Both sexes	1.5	3.9	6.4	7.6	11.9

SOURCE Historical labour force data from Statistics Canada, *The Labour Force*, Cat. 71-001.

What is unusual is that the female unemployment rate is generally higher than the male rate. This phenomenon first appeared in statistics as of 1971, but it was true long before that. It had been the custom for women, as it was for farm workers, to stop working (or to stop looking for work) in times of economic recession. This meant that at such times official estimates of female unemployment were too low. This pattern of behaviour slowly changed, particularly as a result of the revision of the Unemployment Insurance Act in 1970. By substantially increasing benefits, the act created an incentive to stay in the labour force even while laid off. Since 1975, the new monthly labour force survey has taken pains to distinguish between those persons actively seeking employment (the unemployed) and those who are no longer in the labour force.

The relatively high female unemployment rate is at least in part a reflection of the status of women in the labour market generally. For example:

- Women usually have less seniority and experience than men because of their late arrival on the market in such large numbers;
- Women tend to be clustered in a restricted number of occupations and industries.

Since November 1982, however, the unemployment rate for men has been running above the female rate. The economic crisis played no favourites and affected male and female workers alike. While more women lost their jobs in 1981 near the start of the recession, between 1981 and 1983 it was men who were most severely affected, as layoffs hit industries and occupations traditionally considered male preserves: the primary and secondary sectors, transportation, engineering, and middle management. This reversal did not mean any improvement in the economic status of women, however; between January 1981 and March 1983 (the beginning of the economic recovery), the female unemployment rate rose from 8.5 to 12.8 per cent, representing 248,000 more women out of work. These figures probably underestimate the true state of affairs in light of the fact that at the present time 20 per cent of the female labour force is working part-time, that most jobs created since 1975 have been part-time, and that 17 per cent of women are working part-time because they were unable to find full-time work. It should also be stressed that the majority of unemployed women are in a precarious financial situation in that they have very often been unable to save enough to sustain their purchasing power through a period of unemployment.

Although women share the problem of unemployment with other segments of the population, it is questionable whether expansionist monetary and fiscal policies will have a real impact on the female unemployment rate. If the female labour force continues to be concentrated in occupations and industries that are little affected by traditional expansionist monetary and fiscal policies (which include lower interest rates and investment in the construction, transportation, and mining industries), then female unemployment may become more structural than cyclical. The battle against structural female unemployment requires the implementation of specific policies in such areas as retraining, occupational diversification, and job creation in sectors and occupations that predominantly employ women.

Table 1-8

Distribution of Unemployed Persons, by Reason Given, Canada, 1975 and 1981

	1975	1981
	(Per cent)	
Women:		
Illness	5.4	4.7
Personal responsibilities	10.0	8.7
School	4.7	5.2
Lost job or laid off	34.1	44.1
Other reasons	33.5	24.2
Had not worked in last five years	4.3	5.5
Never worked	8.0	7.0
Total	100.0	100.0
	(Thousands)	
Number of women surveyed	229	401
	(Per cent)	
Unemployment rate	8.1	8.3
Men:		
Illness	3.8	3.6
Personal responsibilities	1.5	1.2
School	4.9	5.8
Lost job or laid off	54.0	65.4
Other reasons	29.9	17.5
Had not worked in last five years	-	1.0
Never worked	4.3	4.0
Total	98.4	98.5
	(Thousands)	
Number of men surveyed	391	497
	(Per cent)	
Unemployment rate	6.2	7.1

SOURCE For 1975, Statistics Canada, *Labour Force Annual Averages*, Cat. 71-529, 1978; for 1981, Statistics Canada, *The Labour Force*, Cat. 71-001, December 1981.

The lack of security in many female jobs demands measures specifically adapted to women's job characteristics. Interest in improving women's working conditions must not come to an abrupt end once electoral campaigns are over if women are eventually to benefit as fully as men from their labour market participation.

Moreover, ten years from now the predominating factor determining the working conditions of women will be technological change. Technological advances based on new micro-technologies will have an enormous impact on jobs in the service sector and will also affect both the volume and content of work in occupations traditionally dominated by women. Professor Peitchinis will address this topic later on. It should be emphasized here, however, that, for better or for worse, technological progress will play a decisive role in determining the future working conditions of our female labour force.

The Financial Status of Working Women in Canada

Our first impulse is to applaud the growing presence of women in the labour market. Employment can be the route to financial self-sufficiency, which is a prerequisite for sexual equality in our society. However, being a member of the labour force does not necessarily guarantee adequate earnings; a job that pays enough to meet the worker's essential needs is also required. We will attempt to describe the financial status of Canadian working women by examining the percentage distribution of paid workers by income bracket and by sex, and by comparing the average weekly wages of men and women in similar occupations.

Table 1-9

Distribution of Paid Workers, by Income Bracket and Sex, Canada, 1975 and 1982

	1975		1982	
	Men	Women	Men	Women
	(Per cent)			
Income bracket (dollars):				
Under 2,000	7.0	17.8	9.7	18.6
2,000 - 3,999	5.7	12.0	6.7	11.2
4,000 - 5,999	4.8	9.4	5.4	9.2
6,000 - 7,999	4.3	7.6	4.6	7.8
8,000 - 9,999	4.0	8.0	4.5	7.7
10,000 - 11,999	4.5	9.3	4.3	6.8
12,000 - 14,999	7.4	12.6	7.1	11.0
15,000 - 19,999	15.9	13.6	13.5	13.6
20,000 and over	46.6	9.5	44.0	14.0
Total	100.0	100.0	100.0	100.0
	(Constant dollars)			
Average earnings	20,479	9,847	19,164	10,472
Median earnings	18,926	8,957	17,813	8,837
Average income	22,352	10,888	21,726	12,171

SOURCE Statistics Canada, *Income Distributions by Size in Canada*, Cat. 13-204, 1982.

Table 1-10

Average Wage Rates of Men and Women in Similar Occupations, Canada, 1975 and 1982

	1975					1982				
	Number		Average wage			Number		Average wage		
	Men	Women	Men	Women	Female/male ratio	Men	Women	Men	Women	Female/male ratio
			(Dollars)		(Per cent)			(Dollars)		(Per cent)
Restaurants										
Cashier	214	1,529	122.00	110.00	90.2	100	2,103	4.62^h	4.49^h	97.2
Waiter/waitress	1,706	4,961	2.77^h	2.63^h	95.0	864	1,917	4.95^h	4.39^h	89.0
Retail food stores										
Sales clerk, full-time	5,798	927	222.00	163.00	73.4	7,775	1,464	10.93^h	9.09^h	83.2
Meat packager	399	1,302	181.00	187.00	103.3	593	2,302	8.52^h	10.10^h	118.5
Office occupations										
Secretary, senior	270	24,793	190.00	181.00	95.3	315	34,315	375.00	364.00	97.1
Systems analyst, senior	2,661	323	335.00	300.00	90.0	3,461	803	335.00	300.00	90.0
Office worker	3,238	2,605	120.00	117.00	98.0	1,998	2,130	265.00	248.00	94.0
Programmer, junior	1,865	737	214.00	201.00	94.0	623	502	433.00	413.00	95.4
Stock-records clerk	5,226	3,019	190.00	143.00	75.3	4,050	2,770	374.00	298.00	80.0
Computer operator, junior	1,745	895	176.00	158.00	98.0	1,529	1,762	356.00	314.00	88.2
Accounting clerk, junior	2,776	12,267	158.00	138.00	87.3	1,373	11,079	327.00	289.00	88.4

h – hourly wages; otherwise, weekly.

SOURCE Labour Canada, *Wage Rates, Salaries and Hours of Labour*, 1975 and 1982.

Employment Earnings

Between 1975 and 1982, while there was a slight decrease in the size of the earnings gap (women's average annual earnings as a proportion of men's rose from 49 to 56 per cent), women's earnings remained well below those of men. There are several possible explanations for this earnings gap.

– The high concentration of women in a small number of sectors creates fierce competition among women for a limited number of jobs. Since labour supply clearly exceeds demand, as evidenced by the high female unemployment rate, an employer is able to offer lower wages than if there were a shortage of candidates for available positions.

– Large numbers of women are concentrated in low-productivity sectors such as community, business, and personal services, which together employ 45 per cent of the female labour force.

– Large numbers of women work in low-paid occupations. In 1982, more than half of women (54 per cent) were earning under $10,000 a year, while this was true of only 31 per cent of men. The lowest-paid occupations are traditionally dominated by women, while over 80 per cent of the highest-paid positions are occupied by men.

– The low rate of union representation and the large numbers of women working part-time are also factors that can be cited to explain the existence of a gap in average earnings between men and women.

Wages

Disparities are also evident when data on earnings are broken down and smoothed out for analysis of wage differences between men and women working in the same occupations and industries.

As an example of this comparison, I have selected a number of jobs with similar descriptions. The gaps exhibit considerable variation, and overall they tended to shrink between 1975 and 1982. Yet despite the fact that the relative position of women has improved in almost all occupations, the earnings gaps remain. Generally speaking, the more an industry is dominated by women, the narrower the earnings gap.

Uncontrolled comparisons of this kind, of course, do not constitute proof of discrimination on the basis of sex. Average earnings according to a general occupational classification can often lump together a wide variety of workers with very different job responsibilities. However, the question remains whether such gaps could be completely eliminated statistically by making adjustments for age, experience, seniority, and educational background. This topic can be pursued when Roberta Edgecombe Robb and Louise Dulude present their papers, which are concerned with the issue of equal pay for work of equal value.

We should ask ourselves what policies on the part of governments, unions, and businesses are most likely to lead to improvements in the financial picture for working women. Areas where such measures are needed include: labour codes, collective agreements, human resource management policies in the private sector, the educational orientation of young women, and occupational diversification in the female labour force. The male/female earnings gap attests to a whole range of sex-based disparities in working conditions.

It has long been the custom to explain earnings gaps as being the result of women's lower financial requirements and the lower qualifications required for women's jobs. Since 1956, Canadian law has stipulated that equal wages must be given for work of equal value. Despite such legislation and in the face of the growing acceptance of this principle, wage gaps between men and women continue to exist. Why has legislation in this area proved so ineffectual?

The answers to this question are many and varied but include the following: difficulties involved in identifying jobs of equal value; pay policies based on discriminatory criteria; the length and complexity of legal recourse as provided by law; and illegal practices on the part of employers, such as threats to fire women who complain about job discrimination. The effectiveness of equal-pay-for-equivalent-work legislation can only be improved by investigation into ways to reduce or eliminate obstacles that are impeding the full application of the law. This topic will come up in a later discussion.

Conclusion

Where are we now, and where are we headed?

Over the course of the last decade, we have been witness to a rapid and sustained feminization of the labour market. Women have increased their representation in all occupations and in all industries. The male/female earnings gap has narrowed, despite increases in the number of women who are unemployed or are working part-time. The feminization of the labour force will likely continue from now until the year 2000. Not only will the numbers of working women approach those of men, but also the feminization rate in all industries and occupations will likely keep on increasing, thanks to the more diversified educational backgrounds of women. In many sectors and occupations, the number of women may reach the critical mass necessary to influence social attitudes regarding sexual equality in the labour market. Crossing such a threshold often precedes parity. A minority group, if it is united and determined, can sometimes provide more effective opposition or leadership than an unorganized, fragmented, and apathetic majority.

The coming decade will be crucial to the realization of true sexual equality in the labour market. The contribution and cooperation of all working men and women, unions, businesses, and governments will be required. Over the last decade, mounting interest in women's issues has been evident in all segments of society, and indications are that this interest will continue to grow. The next ten years will be vitally important to improvements in the working conditions of Canadian women.

In conclusion, I would like to thank the Economic Council of Canada, particularly its Chairman, Dr. David Slater, for having taken the initiative to organize this Colloquium. We are 100 men and women from many backgrounds and from all provinces across Canada who have gathered together for three days to discuss the economic problems of the female labour force.

The Colloquium will make a major contribution to the analysis and promotion of realistic policies aimed at achieving sexual equality among Canadian workers.

To all speakers, panelists, workshop chairpersons, and participants, I would like to say that your presence is appreciated and that we count on your enthusiastic participation to make this Colloquium an excellent opportunity to reflect on, and to take to heart, the need for decisive action to improve the place of working women in the Canadian economy.

I wish you all a successful and enjoyable Colloquium.

2 Daycare and Public Policy

Presentation by Michael Krashinsky

Daycare for children of working mothers[1] has become an issue of increasing economic and political importance in the last 25 years. This has happened principally because labour force participation of mothers of young children has become the norm rather than the exception over that period. Between 1967 and 1973 the participation rate of women with preschool children increased from about 17 per cent to about 28 per cent.[2] By 1981 the participation rate was almost 48 per cent and was above 50 per cent for women with preschool children aged 3 years old and over.[3] In other words, while the majority of mothers with infants still remain at home, that majority is declining, and once the youngest child becomes 3, the majority of mothers are in the labour force.

Furthermore, the increase in the participation rate shows no sign of decline. Between 1967 and 1973, the annual rate of increase in the participation rate of mothers with preschoolers was about 8 per cent. Between 1975 and 1981, the annual rate of increase was about 7 per cent (on a much larger base). The participation rates between 1975 and 1981 are shown in Table 2-1, while a breakdown for 1981 is shown in Table 2-2.

These working mothers all require care for their children, and despite demographic trends that have decreased the number of children and closed public schools, the rising labour force participation of mothers has ensured that child care is a growth industry. In 1973, working mothers had 156,000 children under the age of 2 and 362,000 children between the ages of 2 and 5.[4] In 1982, mothers in the labour force had 286,000 children under the age of 2 and 664,000 children aged 2 to 6.[5] The number of preschoolers requiring care while their mothers worked has thus virtually doubled over the last decade.

It is also clear that most of these children are cared for through "informal" arrangements (that is, not in daycare centres or in supervised family daycare facilities), although daycare centres are becoming more important over time. In 1973, 24,000 Canadian preschool children were cared for in daycare centres (compared with 8,000 children in 1967), some 7 per cent of them with working mothers.[6] In 1982, 99,000 preschoolers were cared for in daycare centres and 11,000 in family daycare,[7] which implies that about 12 per cent of the preschool children of working mothers were cared for through formal arrangements.

This increase in formal arrangements is entirely as might be expected. First, one would expect those mothers who have access to inexpensive informal care arrangements to be the first to enter the workforce, so that increases in labour force participation rates will bring into the market mothers who on average must rely more on formal arrangements. Second, as large families become less common, the easy availability of relatives willing to provide care at low cost is eroded. To oversimplify the situation, the aunt, sister, or neighbour who might have provided

Table 2-1

Labour Force Participation Rates of Women, by Age of Children, Canada, 1975-81

	1975	1976	1977	1978	1979	1980	1981
				(Per cent)			
Age of youngest child:							
Under 3	31.2	31.7	34.0	37.6	39.4	41.7	44.5
3 - 5	40.0	40.9	42.5	46.1	47.8	50.1	52.4
6 - 15	48.2	50.0	51.9	54.3	55.6	58.2	61.1
None under 16	42.3	43.2	43.8	44.8	45.9	46.6	47.3
All women	41.9	43.1	44.4	46.5	47.8	49.3	50.9

SOURCE Statistics Canada, "Family Characteristics and Labour Force Activity," Labour Force Research Paper 29, Ottawa, 1982.

Table 2-2

Labour Force Participation Rates of Women, by Marital Status and Age of Children, Canada, 1981

	Married		Never married		Formerly married		All women	
	Per cent	Thousands	Per cent	Thousands	Per cent	Thousands	Per cent	Thousands
Age of youngest child:								
Under 3	44.6	878	36.5	27	46.3	29	44.5	934
3 - 5	51.6	513	53.3	19	61.6	48	52.4	580
6 - 15	60.2	1,383	64.3	17	68.1	186	61.1	1,586
None under 16	47.6	2,802	66.3	54	40.3	257	47.3	3,113
All women	50.6	5,575	57.1	117	52.5	520	50.9	6,212

SOURCE Statistics Canada, "Family Characteristics and Labour Force Activity," Labour Force Research Paper 29, Ottawa, 1982.

care several years ago at low cost may now herself be working or looking for child care!

The problem of course is that formal child-care arrangements are very expensive, and this has led to inevitable demands for public subsidies. For children aged 3 to 5, daycare costs averaged just under $300 a month in Ontario in 1982 and somewhat less in the other provinces.[8] To date, significant subsidies have been available only to the very poor, and daycare has been seen largely as a welfare service. But the growing numbers of working mothers have made coalitions for daycare a potent political force. The efficiency of daycare subsidies and the potential responses to these demands are the subject of the balance of this chapter.

The basic argument advanced below is that daycare subsidies are in general an inefficient way to assist working mothers. The most efficient subsidy would amount to deductibility of all daycare costs before taxes (or welfare benefits) are determined. Beyond that, it is far more efficient as well as equitable to subsidize working mothers by reducing the high rates of taxation that presently apply. Daycare subsidies in excess of deductibility can be justified as a way to assist children, but only if we conclude that children should have devoted to them more resources than parents wish. And such assistance should be available to all children, whether or not their mothers work and, if they do work, whether or not they choose formal child-care arrangements.

In the first section of this chapter, the cost of daycare programs is considered. The argument about the most efficient way to assist mothers is developed in the second section. In the third section, it is argued that daycare subsidies are in part an inefficient way to respond to the inequitable treatment of working mothers in our tax-transfer system. The fourth section discusses child care subsidies as a way to assist children, along with a proposal for a federal subsidy program. The fifth section deals with the different modes of providing child care.

The Cost of a Universal Daycare Subsidy

The most extensive proposals for subsidized daycare usually call for universal subsidies available to all children of working mothers.[9] The cost for such a program is usually quoted at between $1 billion and $2 billion. This estimate is clearly too low. In 1982, even if care had been provided for only the children under the age of 6 whose mothers worked, care would have been needed for 950,000 children. At a cost of about $250 per month (an approximate average cost for daycare in Canada), this amounts to $2.85 billion. But this assumes, first, that no additional preschool children will require care; second, that school-age children require no care; and third, and perhaps more important, that daycare costs will not rise in the face of such a massive federal program.

First, it is foolish to assume that free daycare will not induce a significant number of additional mothers to work. Since daycare presumably would also be provided for children of mothers receiving training or education and to mothers looking for work, the increase is not likely to be small. In 1981 there were more than 2.1 million children under the age of 6 in Canada. Providing care to all of them at the rates mentioned would carry a tab of about $6 billion.

Second, it is unrealistic to expect that parents would be prepared to forgo subsidized child care once their child enters school. One major concern of experts in the child care field is the fate of "latch-key" children – children who leave an empty house in the morning and return to it for lunch and after school. As a result, a number of provinces already provide subsidies for noon-hour and after-school care. The cost per child is about half the cost of preschool daycare (although there are less than half the hours, the split time increases per-hour costs). If we assume that care would be necessary up to age 12, there were more than 2.5 million children between the ages of 6 and 12 in Canada in 1981, and care for all of them would have increased costs by almost $4 billion, for a total cost of about $10 billion.

Third, and most important, it is absurd to assume that daycare costs would not rise if the federal government launched a comprehensive daycare program. Daycare is a highly labour-intensive sector, so its cost depends largely upon the wage rate paid to daycare workers. At present, these workers are among the most dedicated and underpaid in Canada. Many earn close to the minimum wage and are constrained not to raise their salaries because of the fear of pricing daycare out of the reach of those consumers who pay full cost. The competition with the unregulated informal sector also keeps costs down. But were the government to pay, these constraints would disappear.

My earlier study found that even within the private sector, an increase in the proportion of children in a centre receiving subsidies inevitably pushed costs up.[10] Perhaps more persuasive is the fact that in Toronto municipal daycare costs about 40 per cent more than daycare in commercial centres. Not surprisingly, municipal daycare workers are among the few daycare workers who are unionized. Given that, it is hard to imagine that universally subsidized care would not lead to the unionization of all daycare public employees and the associated (and no doubt well-deserved) rise in wages and costs of daycare.

The current cost of daycare in the publicly run centres in Toronto (and although these costs are among the highest in Canada, it is hard to imagine a national daycare union tolerating significant wage differentials) is more than $4,500 for preschoolers over the age of 2 and about twice that for infants. Applying this to the 950,000 preschoolers of working mothers generates a total cost of almost $6 billion; applying it to all the children up to age 12 (assuming that care for a school-age child costs about 60 per cent of that for a preschooler) generates a total cost of $20 billion. And this is not the top figure. If a national daycare workers' union could raise daycare salaries up to the level paid to public school teachers, these estimates could be expected to more than double.

Nor should it be expected that the use of the informal sector can cut costs. As long as the government is covering the full cost of care, supervision of care givers will be essential. The experience with such supervised home care – called family daycare – is that it costs just about the same as care in a daycare centre.

The point of this discussion is not that daycare is expensive and therefore we can't afford it. The care of children is a critical activity in any society, and we cannot afford not to have it done well. The point is that the government should not blunder into a program that inevitably will cost far more than is now being discussed. Whether the total cost is $6 billion or $20 billion, the real issue is ensuring that we obtain value for the funds we spend and that the programs that are launched direct assistance efficiently where it is required.

Efficient Child-Care Subsidies to Assist Working Mothers

In my earlier work, the argument was made that if the aim is to assist working mothers, then subsidies to daycare beyond deductibility are inefficient.[11] Proof of this hypothesis took place within a complex mathematical model that I will not reproduce. The logic, however, is reasonably straightforward.

Economists usually argue that price subsidies are an inefficient way to assist recipients because they lead to "overuse" of the subsidized commodity. Put another way, if a price subsidy is replaced by a simple cash grant that costs the government the same amount, then recipients usually reduce their consumption of the formerly subsidized good and are better off.[12] This would seem to argue that even deductibility of daycare expenses – a form of price subsidy – would be inefficient, but this is not so. The simple argument used above applies only if there are no other taxes. In a world of taxes and especially a significant tax on income, the analysis is more complicated. But if the commodity in question has an inelastic demand and is related to labour market participation (both conditions apply to daycare), then subsidies up to deductibility are appropriate.

To understand why larger subsidies are not appropriate, suppose that we are considering a move from full deductibility to free universal daycare. This would induce mothers in the labour force to switch from unsubsidized informal arrangements to formal ones and those not working to enter the labour force. In each of the two cases, inefficiency would arise because of a variant on the overconsumption problem mentioned above.

In the first case, consider a mother already in the labour force receiving no subsidy beyond deductibility and using satisfactory low-cost informal arrangements. Perhaps the mother leaves her preschool child with the child's grandmother or with a neighbour who prefers to stay at home with her children. A full subsidy to daycare would induce the working mother to move her children into a daycare centre, since this would "save" any amount now being paid to the informal care provider (in the case of the grandmother, perhaps it would save her some inconvenience). Yet the current arrangement is satisfactory, and the gain to the mother in transferring her child to a daycare centre would be far less than the cost of that transfer to the government paying for the subsidy.[13]

Of course I have also assumed that the two types of child care are equivalent in quality. If the child is significantly better off in daycare, then the shift may be efficient. But while some informal arrangements are unsatisfactory, many are perfectly acceptable. Some children may be ill-treated, but others may receive care as good as (or maybe even better than) that provided by their parents. In 1982, 14.4 per cent of the children aged 2 to 6 and 4.7 per cent of the children under the age of 2 of working mothers used formal arrangements. Since many of these were in subsidized slots, it is clear that the vast majority of parents who pay the full cost of child care choose informal arrangements, suggesting that they certainly do not find any supposed superior quality in daycare worth the extra cost. Some of these parents may be displeased (although most parents who were asked about care in a 1973 survey rated their arrangements "good"),[14] some may be fooled, and some just may not care; but it is hard to argue that all the children cared for through informal arrangements require more expensive daycare.

The second case concerns mothers who at present are not in the labour force. A full daycare subsidy would induce into the labour force some mothers for whom such participation is clearly inefficient. Consider a mother who can earn a wage slightly above the minimum wage – that is, $10,000 per year. If that mother has two preschool children, one of whom is an infant, the cost of providing daycare for her children is likely to exceed the money she would earn. Unless the mother regards work in the labour force as greatly preferred to work in the home (and while some work may be inspiring and fulfilling, this is not likely to be the case for work remunerated at close to the minimum wage), inducing this mother to work outside the home will be inefficient. The point is not that daycare for her children will cost the government too much money but that the money will not deliver full value to the recipient. In this case, the mother would be better off staying home and receiving some portion of the money that the government would have spent on daycare, and of course the government would prefer that alternative too.[15]

Again, I have assumed that the child care is equivalent in both situations. If the mother is a poor parent, then the children may be better off if she works. This argument will be addressed below, but it should be noted that we should not be sanguine about the quality of care in daycare centres. At the level of costs and with the staff/child ratios now being used, daycare quality is not always extraordinary. My earlier study cited U.S. work that suggests that current care levels in Ontario and Canada are only slightly above what is called "minimum" quality, a level at which the benefits of having the mother work would be outweighed by the disadvantages to the children.[16] That daycare in Canada tends to be better than that is testimony to the dedication of those working in that sector (although whether that quality would persist in a greatly expanded public system is a moot point). And, of course, opinions about quality do vary. Still, one should not be optimistic about any advantage that children would receive by being transferred from their homes to daycare centres nor use that advantage as an argument for inducing into the labour force those women for whom such a move would otherwise be inefficient.

In each of the two cases above, the inefficiency stems from overuse. In the first case, mothers with satisfactory informal arrangements are induced to use more expensive daycare. In the second case, mothers who should not work are induced to do so and to use daycare. In both cases the argument is that the money to subsidize daycare could be better spent if it were channeled to the families in other ways. It should also be noted that the same inefficiency does not occur when the subsidy is only deductibility. First, mothers who cannot earn more than the cost of their children's daycare are not induced to enter the labour market. Although deductibility in that case would eliminate all taxes or all reductions in welfare payments, it does not reimburse the mothers for the fact that they pay out more than they earn and hence still end up with a reduction in income when they work. Second, mothers do not have a financial incentive to use child care arrangements that are more expensive but not more effective, since deductibility effectively reimburses only a part of any increase in child care expenses and because all forms of care receive equivalent treatment.

This is not meant to be an attack on working mothers. If the choice is between a daycare subsidy and no alternative that directs funds to these families, then the issue becomes one of income distribution – an area where the economist can make no recommendation. Personally I would argue that faced with that choice, daycare subsidies are to be preferred. This is because I believe that the way the tax code currently treats all parents, including working mothers, is inequitable. The point is that there are more efficient ways to assist mothers than by using 100 per cent daycare subsidies.

The Treatment of Working Mothers in the Tax Transfer System

The inequity argument is worth pursuing because it is these inequities that motivate at least some part of the demand for daycare subsidies. Working mothers face large implicit tax rates on their earnings, net of work expenses. In the "traditional" household, a working father who earned $20,000 and had a wife and two children to support might have had to pay about $2,300 in income taxes in Ontario in 1983. He would have had the benefit of his wife's household production without any tax. But if the wife worked and earned, say, $12,000, the husband's taxes would have risen by almost $1,000 (since he would have lost his wife as an exemption), while the wife would have paid over $1,400 in income taxes, for a total tax increase of $2,400.[17] The financial benefit to the family of having the wife work would thus have been only $9,600, and this does not take into account the loss of household production that would have resulted, child care being only the most obvious example.

Now suppose that child care expenses amounted to $5,000. As of 1984, $4,000 would have been deductible, reducing the wife's taxes by almost $1,100. Then the net benefit of working would have been $5,700 ($12,000 minus $5,000 for daycare, minus $1,000 in lost exemption, and $300 in taxes). And this does not include the other work-related expenses, including the loss of other household production.

Had the husband's income gone up instead by $12,000 while the wife remained at home, the family's taxes would have risen by $3,800. This is much more in taxes than had the mother earned the $12,000; yet the family would have been far better off even though its after-tax income would have been less. This is because the family would have avoided the need for daycare and the loss of other household production.

I would argue that taxes on the second earner in the household should be reduced, especially when there are young children in the family, to allow for the loss of this household production as a type of work expense. In economic terms, the technical problem is that household production cannot be taxed. Since this production is lost only when the second adult works, it makes little sense to tax that second adult's income at rates in excess of those applied to the first earner.

The problem also occurs because of the relative insensitivity of the Canadian tax system towards the impact of children on taxable income. Compare two different two-adult families, both with earnings of $32,000 but one with two children and the second with no children. The family with children will pay about $200 less in taxes and receive family allowances of about $700 (plus child tax credits), yet this hardly compensates for the additional burden it faces. One might argue that this situation is inequitable, unless one takes the position that the tax system seems to take – namely, that children are largely a form of consumption by their parents and deserve little consideration.

The problem is even more serious for single parents. A single parent who does not work receives welfare and is eligible for subsidized housing and other benefits. When that parent works full-time, family benefits cease and eligibility for a subsidy begins to disappear. While the implicit tax rate is not usually 100 per cent, it is often quite close,[18] so that the economic benefits from working are minimal, even before one takes into account the loss of household production and other work-related expenses.

This treatment of working mothers, both married and single, seems to reflect an archaic view of mothers in the labour force. If work by mothers is seen as an aberration and if the income they earn is seen as being only for luxury items and not as essential to the family budget, then it is appropriate to tax this income heavily both to discourage women from entering the labour market and to raise taxes from families where this luxury income is available. If mothers work only when their families no longer require them at home, then these families are better off than families with young children and can afford higher taxes. If all families have children at some time, then ignoring children in the tax code more or less evens things out over the life cycle of the family. But, as we have seen, working mothers with young children are now the norm. Those mothers see their work as financially necessary, not as a source of income for luxury goods. It is no longer appropriate to tax working mothers to the same extent as before (if that prior treatment was ever appropriate).

One response by overtaxed mothers has been to demand relief through subsidies for child care. And this has been a politically attractive route, since it enables advocates to build a powerful coalition of interests. Daycare workers have an obvious interest in daycare subsidies, but so do feminists who regard daycare as a way to free mothers to enter the labour force where they belong. Those concerned about children view daycare as a way to reach all children with basic services, while right-wingers concerned about welfare costs view daycare as a way to move mothers off the welfare rolls (since mothers receiving family benefits represent just about the only significant group on welfare that might reasonably be expected to work).

But while daycare subsidies may serve a variety of interests, it is not clear that these interests can agree on what level of subsidy is desirable. And if the real issue is the inequitable treatment of working mothers with regards to taxes and transfers, then focusing on daycare subsidies will allow politicians to do what they have done so far – that is, mount relatively low-cost programs that do not address the underlying inequities that concern working women.

I have argued that the tax transfer system ignores the reality that mothers with young children are in fact in the labour market. Addressing this problem through daycare subsidies overcompensates by ignoring the reality that work inside the household is also productive and that many mothers are more efficient caring for their children within the home, at least while those children are very young. The appropriate response is to design a system that restores horizontal equity among families while remaining as neutral as possible to the choices that mothers make about work in or out of the household and about the choices that families make concerning child care when the mother works.

I do not propose to develop a detailed tax proposal here, but the essence would be as follows. First, the child exemption should be dramatically increased, perhaps to $2,000 per child, with no differential for age or even a reversal of the current policy of increasing the exemption at age 18. This change should be financed by an increase in the rate structure that leaves the general amount of taxes paid by each income class unchanged, thus redistributing income from families with no children or with one child to larger families

Second, the tax rate for working mothers should be reduced by allowing the child exemption (or some portion of it) to be used by both parents when both work and the children are under a certain age. And, of course, child care expenses should be fully deductible. Again, this change could be financed by a general increase in tax rates. Alternatively, both changes could be financed by a reduction in the adult exemption, perhaps making it closer in size to the child exemption. The effect of this would be to allow mothers to choose to work in or out of the household and allow them more income when they work so they can select appropriate child-care arrangements.

The point is not to take a position on whether mothers should work in or out of the household. With about half the mothers of preschool children choosing either alternative, neither would seem to be clearly efficient. In deciding whether or not to enter the labour force, a mother must weigh a complex variety of factors, many of which are personal. These factors would include the mother's wage rate, the potential loss of promotion or productivity in being out of the labour force for a significant length of time, the relative preference of the mother for the two types of work, the availability and cost of reliable child care, the extent of other family income, and so on. The point is to design a system that treats those mothers fairly while remaining essentially neutral concerning that choice. My own view is that the more equitable treatment of these mothers, as described above, improves their financial position and thus permits them to make the choice that is in the best interests of themselves and their families.

There is no doubt that raising children imposes an enormous burden on mothers, both financially and otherwise. Some of the pressure for subsidized daycare arises out of a desire to have society shoulder more of that burden. I agree with this position but suggest that the more appropriate response is the one I have described – that is, to improve the general tax treatment of mothers of young children while not biasing their choice about when and if to enter the labour market.

Furthermore, the choice to enter or leave the labour market is not a once-and-for-all one. The increase in the labour force participation rate as the youngest child becomes older illustrates the obvious: the relative efficiency of work in or out of the household shifts in favour of the labour market as children grow older. Not fully subsidizing infant care is not telling mothers they cannot work; it is simply pointing out the true cost of child care and suggesting that they base their decision about when to work on economic efficiency. Rather than induce an inefficient early return to the labour market for mothers with young children, it would seem to make more sense to adapt our institutions to make the transition out of, or back into, the workforce as smooth as possible for those mothers. For example, the availability of significant unpaid leaves of absence (and guarantees of no loss of seniority or promotional opportunity) and the possibility to work flexible or reduced hours would enable mothers to raise children and maintain careers. As the nature of the workforce changes, the labour market should change along with it, and the government may have to act to remove institutional barriers that remain only because of inertia.

Daycare Subsidies to Assist Children

The discussion so far has assumed that there is no basic difference between the care received by children from their parents, through informal arrangements, and that from daycare centres. One argument for heavily subsidized daycare is that it will upgrade significantly the care received by children. Ignoring the problem of sufficiency of supply of high-quality care (daycare is a highly competitive industry, so there is generally plenty of high-quality care available at a price high enough for suppliers to earn reasonable profits), this argument amounts to saying that children should receive more resources than their parents are prepared to devote to them. In that case, the use of price subsidies to induce families to consume more commodities for children than they would do otherwise is appropriate – for example, if more consumption for children were a merit good or involved significant externalities.

It is important to understand that the point here is not that parents cannot afford good child care. If that were the issue, the appropriate response would be to increase the income of working parents so that they can make decent choices for their children. Rather the point is that whatever one feels is the appropriate income for parents, more of that income should be spent on child care and other child-related commodities.

As an economist, I have no expertise to comment on whether indeed parents devote too few resources to their children. But if one accepts this argument, it still does not follow that the appropriate response is high subsidies to daycare centres. Such subsidies would reach the children of parents who work and use daycare. It is hardly clear that the goal of assisting children necessarily implies that their mothers need be induced to enter the labour force or that, once they are in the labour force, their children should be placed in daycare centres.

Consider first the issue of working. To argue that assistance should be aimed at children whose mothers work, one must believe either that it is mothers who work who devote inadequate resources to their children or that children are poorly cared for in the home and that all mothers should be induced to work. On the first, it is my sense that most working parents are in the labour force not to deprive their children of resources that the children would receive naturally if the mother were at home but, rather, to provide a better standard of living for the entire family. Thus if children would benefit from more resources, there is no reason to single out the children of working mothers. On the second, while there is no evidence to suggest that children in daycare centres are disadvantaged relative to children raised at home (especially at the level of daycare now being subsidized in Canada), there is also no reason to believe the reverse, and thus no reason to shift all child care out of the home or to force women out of the home to receive benefits for their children.

Now consider the issue of assistance through daycare. Since most working mothers do not use daycare, one would have to make a strong argument that alternative forms of extra-family child care are grossly inadequate and that the only way to assist children is to move them into daycare centres, whatever the cost. While there are some people who hold that view, some serious proof would be required, especially given the high cost of a universal daycare program. Failing that, a superior alternative would be a lower-cost program that would assist children regardless of the care arrangements made by their working parents.

It should be noted that the tax reform proposal made in the previous section would improve the quality of care received by children by increasing the incomes of parents with young children and enabling them to make more appropriate decisions about child care. Higher exemptions would make it easier for mothers to stay at home when children are young (if this is appropriate), while the extra exemptions for working mothers with young children, along with the provision of full deductibility of child care expenses, would make it easier for working parents to afford quality child care.

If it is decided that more resources should be directed at children, then, as I have argued in my earlier work, daycare subsidies are not the correct policy. Instead, an early childhood enrichment program should be established running two hours (more or less) per day. Vouchers should be directed at the target group (all parents of young children or perhaps just parents with incomes below a certain level) and the program set up so that it can be used by parents for all types of child care arrangements.

For mothers who are at home, the vouchers would provide a program to enrich the child's experience and provide a break for the parent, which might improve parenting at other times during the day. Alternatively, a play group involving parents might assist children while providing an important social service to mothers who work in the home. For mothers who work and use informal arrangements, the voucher could be used by babysitters to send children to local centres, where they could receive an enriched communal experience. For mothers who use daycare, the voucher could subsidize daycare and provide higher-quality care for part of the day.[19] The critical point is that assistance should go to all children without distorting the parents' choice as to the most efficient form of child care.

On the Efficient Provision of Child Care

This chapter has mentioned incidentally the question of how daycare should be provided. The earlier discussion on subsidies suggested that it is inefficient to bias the choice of parents towards the various kinds of extra-family child care. That is, a subsidy to daycare centres only would be inefficient because it would induce parents with otherwise satisfactory arrangements to shift to higher-cost daycare to qualify for the subsidy. One response would be to subsidize all forms of child care. Most provinces now subsidize supervised family daycare, which is daycare provided in a private home to a limited number of children. Because this form of care is supervised, costs are roughly equal to that of daycare centres.

British Columbia, however, takes another approach by also subsidizing children cared for in their own homes by babysitters, with limits set on the level of subsidy available per child.[20] While the government has no control over the quality of the care, this approach does improve efficiency by reducing the bias towards daycare. However, for parents receiving full subsidy, there is no incentive to choose the most economical form of care (since cost to the parent does not vary) but only an incentive to choose the most convenient. Furthermore, since full daycare subsidies already distort the decision between work in or out of the household, simply reducing the distortion in the choice of child care arrangements is not a significant improvement. The proposal for full deductibility and reduced tax rates discussed above addresses both distortions. Deductibility, of course, applies to all kinds of paid child arrangements.

Finally, if daycare is to be subsidized (either full daycare or the kind of enriched early childhood programs for part of the day described earlier), should those subsidies be available to all daycare centres, regardless of whether they are run by nonprofit organizations, commercial firms, or municipal governments?

The pattern in Canada is varied. In Manitoba, Quebec, and Nova Scotia, subsidies are available only to parents who use nonprofit centres, and in Saskatchewan the requirements are even more stringent, since nonprofit centres must have parent-controlled boards. The remaining six provinces subsidize commercial centres in addition to nonprofit centres, and Ontario and Alberta also have municipally owned daycare centres that receive subsidies.

Presumably the argument for not subsidizing the commercial sector is that this sector seeks to maximize profits and may therefore exploit the subsidy by reducing quality as much as possible to increase profits. The problem, however, is that the nonprofit constraint (that profits may not be distributed to the owners of capital) is a difficult one to enforce, especially in a small labour-intensive firm where the owner may also work in the firm. Restricting the subsidy to nonprofit firms may induce unscrupulous entrepreneurs to masquerade as nonprofit firms. Catching such individuals may be as difficult as monitoring quality in daycare centres (the problem that led us to question subsidies to commercial firms to begin with). The Saskatchewan response eliminates this problem but replaces it with another. Parent-dominated boards of directors can be unwieldy and expensive for the parents involved who may prefer to trust professionals to run both the centre and the board.

The issue has no easy answer. My own preference is for the Ontario and Alberta models that use a variety of modes of provision. Nonprofit centres tend to be innovative and provide high-quality care, while public centres maintain high standards and provide the government with a window into the industry. Commercial centres keep costs down and are responsive to demand. The key is that all centres should be required to be open to parental overview. The mix of centres provides for creative tension in the industry.

Conclusion

The basic argument in this chapter is that daycare subsidies should be restricted to deductibility and available to all types of extra-family care. Further assistance to mothers with young children is necessary and equitable, but it should be structured so as not to distort the choice between work in or out of the household and between modes of child care when the mother does work.

Comments by Nicole Boily

Mr. Krashinsky's chapter is less a blueprint for a government daycare policy than a proposal for a series of tax measures designed to lessen the financial burden faced by working mothers who require daycare services. I believe, however, that there is a need for a general daycare policy involving all levels of government – a policy that would not only include tax measures but also establish planning, assistance, and monitoring mechanisms for daycare services.

Where Mr. Krashinsky stresses productivity and efficiency on an individual basis, I feel that a more comprehensive solution that is also based on economic productivity would be preferable.

In contrast to Mr. Krashinsky, who supports government neutrality, I believe in a more interventionist approach but one that nonetheless respects freedom of individual choice. Daycare is an essential service that not only benefits working parents (both men and women), but it also helps ensure the proper development of children. For this reason, it seems important that a coherent and realistic policy be developed by governments to ensure the growth and accessibility of these services.

While the welfare and development of all children using daycare services must be considered paramount, like Mr. Krashinsky I wish to emphasize the need for a policy aimed at working women, since they are the topic of this Colloquium. I make this comment because I feel a daycare policy should meet the needs of all children, regardless of the labour market activities of their parents.

I would also like to point out at the outset that when daycare services are mentioned, it is always mothers who spring to mind; it is rare that men enter into the discussion. Certainly, in the majority of cases it is women who are mainly, if not completely, responsible for the upbringing of the children. I believe, however, that the responsibilities of fathers should be emphasized more. This might alter the approach with respect to the need of daycare services and daycare policy.

Nevertheless, given prevailing social attitudes towards the respective roles of the two sexes, it is clear that adequate child-care services are specifically a prerequisite to greater independence for women and to their right to enjoy the same employment opportunities as men (should they choose to work).

Indeed, the presence of women in the labour market must not be regarded as a manifestation of a cyclical phenomenon but as a sign of deep-rooted change in our society. Mr. Krashinsky provides some interesting statistics on the increasing number of working mothers. The significant increase in the number of women aged 18 to 35 (the primary child-bearing years) who are either working or looking for work is particularly noteworthy. This is indicative of an irreversible trend that is explained by a number of factors other than the recent period of bad economic times, which often forces even two-parent families to resort to two incomes to make ends meet.

If, following the argument advanced by Mr. Krashinsky, governments should remain neutral, neither encouraging nor hindering women from entering the labour market, they must nevertheless adapt to changing realities. In my opinion, governments are not and can never be neutral; it is their duty to guarantee equal access to employment without attempting to channel or push women into certain occupations. Thus I am convinced that supporting structures are necessary to guarantee equal employment opportunities for women, including catch-up measures. Daycare services represent a key element in such an approach.

It is too easy for a policy of neutrality, such as that advocated by Mr. Krashinsky, to turn into a "wait-and-see" approach that is no longer neutral but actually works to the disadvantage of women who want to participate in the labour market, making it more difficult for them to support themselves.

Given that maternity has a social dimension as well as being a private matter, given that every child has both a father and a mother (even if they do not necessarily live together), and given that the right of women to employment is an established fact, it becomes increasingly clear that daycare services must be considered a social obligation. It remains to determine exactly which services are the most important and what role governments should play in supporting them.

Contrary to what Mr. Krashinsky says, direct government intervention through assistance and support to daycare services does not necessarily mean setting up a free service for all, subsidized entirely by the state. This is a misconception that should be dispelled once and for all. Thus the figures presented by our speaker should be examined in the light of various financing and organizational possibilities.

For instance, the policy found in Quebec (which also exists elsewhere in Canada) can be cited, where nonprofit daycare centres and in-home agencies that are partially subsidized by the government are run by a Board of Directors made up primarily of parents. Private, profit-oriented daycare centres represent another part of this system. While they do not receive government funds directly, their customers receive means-tested financial assistance.

I believe the establishment and development of a comprehensive system is essential to ensure the coordination and high quality of daycare services. Otherwise, we will be faced with a situation of uncontrolled development and inadequate services.

There will still be a place for private efforts; this is not an inflexible system where free choice no longer exists. I am merely proposing a policy that takes into account the accessibility and quality of service, similar to the approach found in education and health care (here I am speaking only in general terms; the organization and financing of these two sectors are quite different).

As stated at the beginning of this commentary, I am astonished that the policy advocated by Mr. Krashinsky makes provision for assistance or support to the mother or the parents only through tax measures such as larger tax deductions for daycare expenses (up to 100 per cent) and lower tax rates.

Such a solution, in my opinion, is aimed only at correcting the financial inequalities experienced by working mothers, particularly those with fairly good salaries, since the degree of assistance increases with the level of earnings. Working women in lower income brackets will gain nothing from this tax-oriented approach to the problem. As Mr. Krashinsky himself states in his chapter, in some cases mothers have nothing to gain monetarily from taking outside employment and are better off at home, particularly since outside work generally involves indirect costs.

While I certainly recognize the contribution made by women in the home, the attitude adopted by Mr. Krashinsky seems both elitist and quite negative as far as middle- and low-wage earners are concerned. Is the analyst not perhaps abandoning his neutral stance by making these assumptions? The horizontal equality proposed by Mr. Krashinsky conceals a vertical inequality.

Under the cover of neutrality and personal economic efficiency, this reflects an attitude that often crops up in certain circles in bad economic times – namely, that mothers should stay home to look after their young children's education.

Clearly, this short-term view can be advantageous to policy makers in that jobs in short supply no longer have to be shared between men and women, and services such as maternity leave and daycare become unnecessary. But not only does this attitude penalize a significant portion of the population, it also ignores principles of efficient human resource management and its contribution to economic development. Thus the apparent inefficiency and unprofitability of daycare services is merely relative and must be examined in the light of social goals and future objectives.

I am well aware that, beyond the question of establishing priorities, the development and maintenance of a daycare system will be costly. Nevertheless, I am convinced that a consistent and realistic policy consisting of support for daycare services and financial assistance to parents on the basis of their earnings represents the fairest course of action to follow, both in the present context and in order to ensure better service access and quality in the future.

The question of costs aside, I also recognize that the present system does not always meet all child care needs, mainly because of lack of space. But this is not a reason to deny all the progress already made in this area or to dismiss future efforts. While it is true that parents who do not currently avail themselves of these services are on the whole satisfied with the private arrangements they have made, in most cases they had no other alternative, and often the difficulties involved were considerable.

Moreover, without suggesting that all daycare services available outside the public system are inadequate, the standards and regulations of public systems appear to set the standards of quality for all others. This is important, because the establishment of a public system will involve several phases, and the parallel private system will continue to play its role during this period.

In closing I would like to touch on a subject not explored by Mr. Krashinsky: the relative jurisdictions of the various levels of government. Up to now, daycare services have been a provincial responsibility, although the federal government has been involved through its participation in the Canada Assistance Plan (CAP). I think this arrangement should be preserved in the interests of efficiency and so that the services can be tailored to the needs of each region and province.

In conclusion, I would like to repeat that I favour a daycare policy integrated into the larger scheme of social systems required by any modern country, in the same way as education and health care policies. I believe that daycare policy should include not only tax measures but also direct assistance to programs and their users, with a view to encouraging the development of a comprehensive daycare system, the quality of which would be monitored by government. This is the surest way to bring about substantial improvements in the economic status of working women.

Floor Discussion

Professor Krashinsky's arguments in favour of child care subsidies met with some reaction from the floor. Several participants claimed he had taken a regressive approach by favouring a horizontal redistribution of income from adults in general to parents rather than a vertical redistribution from higher- to lower-income groups. Of particular concern was the impact his proposal could have on single-parent families, in large measure headed by women. One participant observed that financing an increase in the child tax exemption by reducing the adult exemption could raise taxes significantly for this particular group; another pointed out that tax-based assistance does not benefit people with low incomes.

Professor Krashinsky countered by arguing that a decision to make the overall tax system more progressive belongs to politicians rather than economists. Consequently, despite his personal support for a more progressive system, he confined his analysis to the question of achieving equity within specific income classes. In response to concern about the use of tax exemptions, he observed, first, that the reduction in adult exemptions would not be as large as the increase in child exemptions, since revenues would be recovered from everyone using the personal exemption, and redirected only to people with young children; and, second, that assistance could be provided through taxable family allowances rather than through exemptions, with greater redistributive effect.

Some concern was expressed about Professor Krashinsky's contention that the assistance should be structured so as not to distort the choice between work in and out of the household. The costs of staying at home transcend simple market costs, one participant argued. Opportunity costs, in terms of forgone education and experience, also merit consideration. Professor Krashinsky's approach, she said, not only makes no allowance for these concerns, but also provides no incentive for women to further their education.

Professor Krashinsky agreed with this observation but maintained that the daycare system should not be expected to absorb all the costs of women's increased labour force participation. Other programs are better geared to assist those wanting more education, he said. Further, he saw reforms in institutions and laws as the best means of protecting the labour market positions of women who opt out to look after their children.

Ms. Boily was asked whether group daycare is now the most popular option, given that earlier research showed many parents preferred other methods. She replied that, in her view, thinking has changed considerably in recent years. A Quebec study suggests, she said, that families are steadily becoming more interested in this form of child care, particularly for children over the age of two. Currently, many parents see group daycare as providing greater opportunities for socialization, development, and stability than does home care. Professor Krashinsky disagreed with this observation, however, arguing that more concrete proof is required.

Another participant commented that many working women choose home care over daycare in order to provide the household not only with a "mother" substitute but a "wife" substitute as well. Given the present unemployment picture and the possibility of further job loss with the advent of new technology, a child care option that employs numbers of women has definite advantages, the participant said.

Ms. Boily replied that her intention was not to disparage home care. But she reminded her listeners of the need for adequate controls in this area, adding that home care is more costly and, therefore, inaccessible for some parents. She also stressed the importance of a "collective vision" in the daycare field.

In response to a query on whether subsidies should go to parents or directly to daycare centres, Ms. Boily observed that, in her view, universal daycare is made possible only through state planning and organization. For that reason, child care arrangements should not be left entirely in the hands of parents; rather, subsidies should be given directly to daycare centres and, when necessary, financial assistance provided to parents using the facility.

3 A National System for Parental Leave

Presentation by Monica Townson

The majority of women of childbearing age in Canada now participate in the workforce. In the past eight years alone, the labour force participation rate of women aged 25 to 34 has risen by 28 per cent. Consequently, the issue of paid parental leave has been receiving increasing attention.

Canada is a signatory to the United Nations' Convention on the Elimination of All Forms of Discrimination Against Women, adopted by the United Nations General Assembly in 1979. The preamble to the agreement refers to "the great contribution of women to the welfare of the family and to the development of society, so far not fully recognized, the social significance of maternity and the role of both parents in the family and in the upbringing of children," and acknowledges that "the role of women in procreation should not be a basis for discrimination but that the upbringing of children requires a sharing of responsibility between men and women and society as a whole."

Among other things, the parties to the agreement (including Canada) agreed to "introduce maternity leave with pay or with comparable social benefits without loss of former employment, seniority or social allowances."

The International Labour Organization's Convention on Workers with Family Responsibilities, originally passed in 1965, provided that "with a view to creating effective equality of opportunity and treatment for men and women workers, each member should make it an aim of national policy to enable persons with family responsibilities who are engaged or wish to engage in employment to exercise their right to do so without being subject to discrimination and, to the extent possible, without conflict between their employment and family responsibilities." Interestingly enough, the ILO convention originally referred to "women with family responsibilities" and was changed to cover both parents in 1981.

Maternity benefits have been available in Canada through the unemployment insurance (UI) scheme since 1971. But they are paid for only a limited period of time; they replace only 60 per cent of the worker's previous earnings up to maximum weekly benefits; and they are payable to mothers only (with the exception of adoptive parents, as discussed below).

The movement for fully paid parental leave, as the term implies, is based on two fundamental principles: first, that the leave should be fully paid and, second, that it should be available to either parent.

Labour force data indicate that the majority of women of childbearing age are now in the labour force (Table 3-1).

Table 3-1

Labour Force Participation Rate of Women Aged 25-34, Canada, by Province, 1983

	(Per cent)
Newfoundland	53.0
Prince Edward Island	66.3
Nova Scotia	62.7
New Brunswick	58.5
Quebec	62.6
Ontario	72.9
Manitoba	71.0
Saskatchewan	66.7
Alberta	68.8
British Columbia	68.1
Canada	67.6

SOURCE Statistics Canada, *Labour Force Annual Averages, 1975-83*, Cat. 71-529, 1984, Table 13.

Contrary to popular belief, the majority of women of childbearing age who are employed have full-time jobs. In fact, these women have the lowest percentage of part-time employment of any cohort of women employed (Table 3-2).

In view of the evident attachment of women of childbearing age to the labour force, it is clear that a mother who may only receive 60 per cent of her usual salary (up to a maximum) while on maternity leave will suffer a financial penalty. The Canadian Union of Postal Workers, which negotiated fully paid maternity leave through collective bargaining in 1981, calculated that a full-time postal clerk would lose over $4,000 under the UI maternity benefits program.

Table 3-2

Full-Time and Part-Time Employment of Women, by Age Group, Canada, 1983

	Number employed		Proportion employed part-time
	Full-time	Part-time	
	(Thousands)		(Per cent)
Age:			
15-24	757	384	33.7
25-44	1,773	499	22.0
45-54	494	167	25.3
55-64	261	101	27.9
65 and over	33	26	44.1
Total	3,318	1,177	26.2

SOURCE Statistics Canada, *Labour Force Annual Averages, 1975-83*, Cat. 71-529, 1984, Table 29.

A woman whose earnings were at the median level for the 25-34 age group would give up more than $2,500 as a result of the 60 per cent limitation on maternity benefits.[1] In view of public commitment to full and equal integration of women into economic life, such financial penalties imposed on women who have children are obviously inappropriate. The Canadian Advisory Council on the Status of Women has pointed out the need to recognize "a woman's right to retain her economic independence while bearing children."[2]

The need to extend benefits to either parent has been recognized by those who argue that women will never be able to achieve equality until men participate in domestic labour in the same way as women now participate in paid labour. The existing system of maternity benefits does not allow that participation. A system of paid parental leave would enable both parents to share their family responsibilities and to move away from the stereotyping of women into traditional roles. It is important to recognize that unless parental leave is fully paid, a family would not be able to afford to have the higher-paid spouse stay at home. Since median earnings of full-time male workers in the 25-34 age group are 39 per cent higher than those of women in the same category, extending the leave to either parent but retaining the level of benefits at 60 per cent would make it highly unlikely that any fathers would take the leave.

The European Experience

A number of European countries have paid-maternity-leave provisions that replace a higher percentage of the worker's earnings and for longer periods of time than the maternity benefits available through the UI scheme in Canada. Portugal has paid maternity leave that replaces 100 per cent of earnings for 3 months; the Federal Republic of Germany has insurance guaranteeing 100 per cent of earnings for 14 weeks; the Netherlands provides 100 per cent of earnings for 12 weeks; Denmark's program replaces 90 per cent of the worker's usual weekly earnings for a period of 24 weeks; France has a paid maternity insurance scheme that replaces 90 per cent of earnings for 16 weeks; Sweden's parental insurance scheme provides for replacement of 90 per cent of salary for a maximum of 270 days available to either parent; and Italy's program provides 80 per cent of earnings for 5 months. In fact, out of 23 countries where benefits are related to earnings, 22 pay higher benefit levels than Canada.

However, the philosophical underpinnings of parental leave policies vary considerably from one country to another. Hungary's approach to maternity benefits and paid leave is based on encouraging mothers to stay at home with their children for the first three years of a child's life. The policy evolved in the mid-1960s when women were entering the labour force in ever-increasing numbers and the pace of economic growth was slowing. Lack of employment opportunities for large numbers of unskilled young people, coupled with doubts about the impact of the existing group daycare on very young children, and an inability to meet the costs of high-quality group care led to the present policy whereby the government subsidizes mothers to withdraw from the labour force for a period of time.

Such an approach to parental leave would clearly not encourage any sharing of domestic labour and continues to emphasize a traditional role for women.

Other countries have tried to structure their parental benefits programs to increase the birth rate. The German Democratic Republic, for example, has adjusted its program to meet concerns about declining birth rates. Female labour force participation is higher than in any other industrialized country. Women are expected to be in the workforce, and policy has been designed to assist them in dealing with maternity and childbirth while they continue to be employed.

The German Democratic Republic provides 26 weeks of maternity leave at 90 per cent of salary. For a second child a mother is entitled to an additional 26 weeks of leave at a flat rate of benefit. And for the third child or subsequent children the extended leave at a flat rate of benefit is available until the child is 18 months old.

It is apparent that this type of program implies that the mother will retain major responsibility for child-rearing, since only mothers may claim paid leave, although unpaid, job-protected leave is available to other family members, such as a father or a grandmother, until the child is 1 year old.

Paid parental leave in Sweden, on the other hand, has an entirely different philosophical basis, articulated quite specifically. The Swedish approach was outlined in a report to the United Nations in 1968, which stated that:

> Every individual, irrespective of sex, shall have the same practical opportunities, not only for education and employment, but also in principle the same responsibility for his or her own maintenance as well as a shared responsibility for the upbringing of children and the upkeep of the home. . . . The view that women ought to be economically supported by marriage must be effectively refuted . . . the husband's traditional obligation to support his wife must be modified to constitute a responsibility, shared with her, for the support of the children. This concern for the children should also be manifested in a greater degree of participation in the supervision and care of children on the husband's part.

While official efforts to encourage men to share in domestic labour have had only limited success, nevertheless policy is structured in such a way that the involvement of both parents is possible. Program design in other countries, including Canada, sets up effective barriers to such sharing by specifying that benefits are payable to mothers only. Kammerman and Kahn[3] have pointed out that "the Swedes are convinced that it is beneficial for women, their husbands, and their children if women work, and Swedish policies are designed to encourage this." There is also a belief that the fact that men are also entitled to the leave helps to prevent discrimination against women in the workforce and works towards the long-term goal of full equality between men and women both in the workplace and in the home.

Three types of parental allowance are payable in Sweden. The most important, perhaps, is a 6-month paid leave available to either parent at 90 per cent of her or his usual wage (up to maximum insurable earnings) that must be taken before the child is 270 days old.

It is clear that maternity benefits and paid parental leave constitute a powerful policy instrument by which particular social goals in relation to women's employment can be achieved. In addition, as the European experience outlined above has shown, policies and programs may be designed in an attempt to meet other objectives such as increasing the birth rate or discouraging women from participating in the workforce.

The Case for Fully Paid Parental Leave in Canada

There is now increasing pressure for fully paid parental leave in Canada and some trade unions have successfully negotiated such benefits as part of their collective agreements. The fact that Canada is a signatory to the United Nations' Convention on the Elimination of All Forms of Discrimination Against Women implies that there is some official commitment to recognizing that motherhood is a social function and that those who must combine work and family responsibilities should not be penalized. However, that commitment has not yet been fully translated into policy. There is a need, then, for Canada to honour the commitment it has made to policy in this area.

Labour market policies in Canada have recognized that high levels of female labour force participation are unlikely to be reversed. At the federal level, policies have already been introduced to provide equal employment opportunity, equal pay for work of equal value, affirmative action, and special training for nontraditional jobs. Yet women are still penalized during their childbearing years.

As we have seen, the majority of women of child-bearing age are now in the workforce. It can no longer be assumed that once a woman has a child, she will withdraw from paid labour and remain at home until the child reaches school age. In fact, that option was only ever available to those families where the earnings of one spouse were adequate to support the entire family – a situation increasingly rare these days.

Labour force participation of mothers with young children has increased dramatically in most major industrialized countries over the recent past. In Canada in 1976, for example, less than 32 per cent of mothers with children under the age of 3 were in the workforce. By April 1984, the labour force participation of this group had risen to almost 52 per cent, representing an increase of 59 per cent in the participation rate of this group in a period of only 8 years. Sixty-eight per cent of employed women in this group had full-time jobs.[4]

As long as benefit levels remain at only 60 per cent of usual earnings, a financial penalty is being exacted on women who bear children. Such a penalty is clearly inconsistent with other government policies to facilitate the full and equal integration of women into the Canadian economy.

In the past year, the case for making "maternity" benefits available to fathers as well as mothers has gathered strength. Since January 1, 1984, "maternity" benefits under the UI program have been available to adoptive parents and may be claimed by either the mother or the father of the child if either parent can prove "that it is reasonable for that claimant to remain at home by reason of the placement with that claimant of one or more children for the purpose of adoption" [Sec. 32(1)].

In addition, the Canadian Human Rights Commission has received complaints charging that it is discriminatory not to pay benefits to fathers who have to leave work to look after newborn children, when UI pays maternity benefits to mothers. It could well be that such differentiation will receive closer attention now that the equality provisions of the Charter of Rights are about to come into force.

Finally, it should be noted that a considerable number of workers in Canada already have fully paid parental leave because they have been able to negotiate it through collective bargaining. In most of these agreements, there is provision for the employer to make up the difference between UI maternity benefits and the worker's usual salary. Such a mechanism, of course, puts the entire cost burden of fully paid leave on the employer. In view of Canada's stated commitment to equality of opportunity for all women, it would be preferable to have a national system of parental leave so that all families (and not just those where parents are members of trade unions) could benefit, and where costs would be shared by all interested parties.

The Case against Fully Paid Parental Leave

Those who argue against paid parental leave usually base their objections on two main viewpoints: first, that decisions on whether or not to have children are private decisions, and thus no societal responsibility is involved; and, second, that a national program would be too costly. Another objection sometimes raised is that such a program would encourage women to have more children or perhaps to enter the workforce so they could qualify for what are seen as generous benefits.

The answer to these objections may be found largely in the data already presented. The majority of women of childbearing age are already in the workforce. It would appear most unlikely that even more would enter (perhaps exacerbating already high levels of unemployment) merely to qualify for paid leave.

The notion that the availability of fully paid parental leave would cause some kind of population explosion seems so implausible, it is difficult to take it seriously. It has been estimated that it may cost as much as $100,000 to raise a child up to the age of 18. It is difficult to imagine how anyone could commit themselves to 18 or 20 years of added responsibility and expense merely for the sake of getting a few weeks of paid leave when the child is born.

Decisions on whether or not to have children are surely based on other considerations. However, for families with low incomes, it may be that the financial penalty involved in taking maternity leave acts as a deterrent to childbearing. If parents continue to be financially penalized, we may eventually reach a situation where only higher-income couples will be able to afford to have children – a situation that would surely be unacceptable to the majority of Canadians.

The arguments about the possible costs of a fully paid parental leave program are dealt with in a later section of this chapter.

Paid Parental Leave through the UI Program

There are several possibilities for the development of a national system of fully paid parental leave in Canada. One would be to allow provisions to develop haphazardly through the collective bargaining process. But as we have already noted, only a minority of workers are members of trade unions. As well, this approach places the entire cost burden on the employer, and there are compelling reasons why the costs of such a program should be shared by all concerned.

A second possibility would be to cover paid leave through employee benefit programs. This is the approach taken in the United States where there is no national system of maternity benefits such as Canada has. Such a system would be analogous to the pension plans that are provided by some employers for their employees. But just as the private pension system has not been able to provide adequate pensions for all employees, it would seem doubtful that private disability insurance to cover employees who take maternity or parental leave would be an adequate response to the desire to provide a national system of fully paid parental leave.

Perhaps the biggest drawback to this approach would be the question of coverage. It would appear that less than one-third of employed women have access to employer-sponsored disability insurance plans. Coverage might be improved by offering tax incentives or UI premium reductions for employers who have disability plans covering maternity. But there would still be questions about the income replacement level, about the length of the benefit period, and about how benefits could be extended to fathers, who clearly could not be considered "disabled" as a result of pregnancy.[5]

Perhaps the simplest way to implement a national system of fully paid parental leave would be through an expansion of the existing program of maternity benefits provided by the Unemployment Insurance Act. This is already a national program, with established funding mechanisms, and it would be relatively easy to convert it into a national program of paid parental leave.

Maternity benefits are now available under the UI program to replace 60 per cent of previous earnings up to the maximum insurable earnings limit. They are paid for 15 weeks after an initial 2-week waiting period. To change the program to one of paid parental leave, similar to those provided in some other countries referred to earlier in this chapter, would require an increase in the level of income replacement and probably an extension of the length of time for which benefits are payable. It would also be desirable to make benefits payable to fathers or mothers. But since this has already been done in the case of adoption, such a requirement would be unlikely to present any obstacle.

Policy choices in relation to a national system of fully paid parental leave may well be constrained by the cost of such a program. On the other hand, costs will vary widely depending on the combination of options chosen and the assumptions on which the cost calculations are based. Policy options might include the following:

- Increase the benefit level from 60 per cent of earnings, up to maximum insurable earnings, to 75 or 95 per cent but retain the current 15-week benefit period.
- Increase the benefit level, retain the 15-week payment period, but remove the limit on earnings. (This option would ensure that those parents who earn more than maximum insurable earnings would receive full income replacement while on leave.)
- Increase the benefit level and extend the payment period, perhaps from 15 weeks to 26 weeks. (Many adoption agencies require that a parent remain at home with a newborn adopted baby for the first 6 months. A 26-week benefit period for natural parents would therefore be consistent with this.)
- Retain the qualifying period for benefits at the present requirement of 20 weeks or make the entry requirement (the period of time a claimant must work in order to qualify for benefits) the same as that imposed for regular unemployment benefits. (This was recommended by the Unemployment Insurance Task Force that reported in 1981.)

There is also the possibility that instead of expanding the maternity benefits part of the current UI program, a separate contributory insurance program might be established to cover maternity/parental benefits. There is some question, though, as to the constitutionality of the federal government undertaking such a venture. Provincial governments could, conceivably, set up such programs on a province-by-province basis, but again this would not constitute a national system of paid parental leave.

As well, if parental leave were covered under a separate program, it might be difficult to secure public support for the idea that all members of society should contribute to it and not just parents or potential parents.

The Cost of Expanding the UI Program

Estimates of the cost of various policy options for an expansion of the current maternity benefits program under the Unemployment Insurance Act were prepared in 1981 by the Income Maintenance Program Analysis Directorate of Employment and Immigration Canada.[6]

Assumptions about take-up rates have a major impact on these cost estimates. Although only about 45 per cent of potential claimants received maternity benefits under the existing UI program in 1981, some of the estimates assumed a take-up rate of 70 per cent. This figure, of course, does not represent either an upper or lower limit to the claim rate and hence to program costs. There is simply no way of predicting accurately what percentage of those eligible will actually claim benefits.

The cost estimates also make certain assumptions based on program experience, unemployment rates, and other factors that may have changed since the estimates were calculated. Nevertheless, the estimates are still valid as an indication of the very significant variation in cost that results from different changes in program design.

The results of these calculations may be summarized as follows:

- A national system of fully paid parental leave, replacing 95 per cent of earnings up to the maximum insurable earnings limit and paying benefits for 26 weeks, would cost approximately $1,164 million (in 1981 dollars) – or about $895 million more than would be paid out in maternity benefits under the existing program in 1985 (this assumes that the qualifying period for parental benefits would be the same as that for regular UI benefits and that, consequently, more people would qualify).
- Total program costs including benefits to adoptive parents would be reduced to $1,132 million

(in 1981 dollars) in the year 2000 as a result of a levelling-off of participation rates.

- If no maximum earnings limit were placed on the 95 per cent income replacement ratio, the total cost of the program would be about $1,289 million.
- Retention of the existing 60 per cent benefit level for UI maternity benefits and the 20-week entrance requirement but extending the benefit period from 15 weeks to 26 weeks would cost about $197 million more than the current program (this estimate assumes a continuation of the current 45 per cent take-up rate).
- A parental leave program paying benefits for 26 weeks at 75 per cent of previous earnings with no maximum limit would cost about $714 million more (in 1981 dollars) than the existing UI maternity benefits when the program is fully operational.
- Retention of the 20-week entrance requirement but increasing the benefit level to 95 per cent with a maximum insurable earnings limit and extending the benefit period to 26 weeks would cost about $480 million more than the existing program (again this assumes the current 45 per cent take-up rate).

It is clear from the estimates that major variations in cost result from changes in assumptions and in various terms and conditions under which benefits would be paid. A change in the entrance requirements, leading to a higher take-up rate, for example, can make a difference of $400 million in the cost. A program to pay benefits for 26 weeks at 95 per cent of earnings, with a maximum insurable earnings limit, would cost $480 million more than the existing program if the present 20-week entrance requirement is retained and there is only a 45 per cent take-up, but it would cost $895 million more than the existing program if a variable entrance requirement of 10 to 14 weeks is imposed and take-up increases to 70 per cent. (It should be noted that the Unemployment Insurance Task Force described the 10- to 14-week entrance requirement, which was the one prevailing when it issued its report, as "generous by international comparison."[7] It recommended an entrance requirement that would vary by region, according to the level of unemployment, from between 15 and 20 weeks. It also recommended that higher entrance requirements for special claimant groups, such as those claiming maternity benefits, should be removed. Current entry requirements vary between 10 and 20 weeks, depending on the region.)

Financing an Expansion of the UI Program

The existing system of maternity benefits is financed entirely from contributions made by employers and employees, with employees paying $2.30 per $100 of weekly insurable earnings. The employer paid 1.4 times the employee rate, or $3.22, in 1984. Maximum insurable earnings in 1984 were $425 a week, so the maximum UI contributions were $9.78 a week for employees and $13.69 per employee for employers.

Just what kind of a premium increase would be required to finance the various policy options outlined above would depend on whether the federal government contributed to the program. In relation to the funding of the entire UI program (including regular and special benefits), the Task Force said that an increase in the government's share of the program from its present level would raise the proportion of program funds gathered through the progressive vehicle of taxes and increase the program's redistributive effects. A greater tax-based program would also reduce any disincentive to hire workers that may be implicit in payroll taxes in general and UI premiums in particular. (Payroll taxes raise the cost of employing workers compared with that of using capital. They also inhibit employment growth in favour of more use of machinery and equipment.)[8]

The Task Force recommended that the federal government pay a fixed share of 15 per cent of the cost of all programs provided through unemployment insurance, including maternity benefits.

Assuming no change in the current funding arrangements for maternity benefits (that is, no contribution from government revenues), an extended program to provide 95 per cent of earnings for 26 weeks, with a variable entrance requirement of 10 to 14 weeks (the same as that for regular benefits) and a limit of maximum insurable earnings, would require an increase in employee contributions of about 31 cents per $100 of weekly insurable earnings and an increase in employer premiums of about 43 cents per $100 of insurable earnings. (This assumes a 70 per cent take-up rate.)

If the federal government were to contribute 15 per cent of the cost, the premium increase would, of course, be lower.

An employee earning at or above maximum insurable earnings would have to pay an additional 95 cents a week to cover the cost of this option, and this would have to be matched by an increase of $1.33 a week from the employer.

These estimates are based on the 1981 calculations referred to above and may now have changed slightly, based on new program experience. Nevertheless, they indicate a very modest increase in premiums to finance this particular option, which, it must be emphasized, is one of the most expensive options of all those for which cost estimates were prepared. Retaining the 20-week entry requirement, for instance (and assuming the current 45 per cent take-up rate would continue), would reduce the cost by almost half, implying an additional cost to employers of less than 70 cents a week for employees earning at or above maximum insurable earnings, and even less for employees earning below the maximum.[9]

Implementation of the Proposals

Improvements in the delivery of maternity benefits under the UI program are already being made. As of January 1, 1984, for instance, benefits were extended to adoptive parents; the so-called "magic 10" rule specifying that a claimant must have been employed for 10 weeks around the time of conception was dropped; the rule that prohibited women from claiming regular UI benefits during the period beginning 8 weeks before the expected birth of the child and terminating 6 weeks after the birth was removed; and other changes to streamline maternity benefit provisions came into force.

It seems clear that policy could easily move in the direction needed to change the program to one of fully paid parental leave. One possibility would be to implement changes in gradual stages. The first step might be to increase the level of benefits, while leaving all other terms and conditions the same as they are now. At the same time, benefits for natural parents should be made available to either the mother or the father, as they are for adoptive parents. If the benefit period were retained at the current 15 weeks, plus an initial 2-week waiting period, it would be unlikely that many fathers would take advantage of the benefits because most of the leave time might be needed by the mother to recuperate from the birth. However, it would be important to establish the principle that the program is one of "parental" and not "maternity" benefits.

As a second step, the benefit period could be extended from the current 15 weeks to 26 weeks. This could perhaps also be accomplished in two stages; the first might be an increase from 15 to 20 weeks, and the second from 20 to 26.

While these changes could be made by the federal government, an effective national system of fully paid parental leave would require provincial cooperation. The Canadian Advisory Council on the Status of Women has pointed out that the recent extension of benefits to adoptive parents may not help these parents.[10] Under provincial legislation, they may not qualify for a leave of absence from their jobs – a fact that "both contradicts the federal government's regulations and frustrates its initiative in this area."

Conclusion

There are bound to be difficulties in implementing a national system of paid parental leave through an expansion of the existing maternity benefits program under the Unemployment Insurance Act. Some people object to maternity benefits being part of the UI program at all. However, the Task Force concluded that "surveys of public attitudes show broad support for the presence of maternity benefits as part of unemployment insurance."[11]

At the moment, the income replacement ratio for maternity benefits is the same as that paid for regular unemployment benefits under the UI program. Adoption of a 95 per cent replacement rate for parental benefits, while other benefits remained at 60 per cent, might raise questions of equity. It would therefore be important to establish a clear philosophical basis for fully paid parental leave. The policy rationale must be clearly articulated and well understood in order to ensure broad public support.

Arguments about cost will undoubtedly be raised. Many will be opposed to even a minor increase in federal government spending when the deficit is causing such concern. It must be noted, though, that the increased cost to the federal government of one of the most expensive options in 1985 was estimated at only $181 million (in 1981 dollars). By way of comparison, tax revenue forgone as a result of tax deductions for contributions to the Registered Retirement Savings Program (RRSP) amounts to $1.7 billion a year, and another $675 million will be lost to the federal government as a result of increasing these deductions over the next three fiscal years. The National Council of Welfare has estimated that only a taxpayer earning more than $80,000 a year would be able to take full advantage of the increased RRSP deduction announced in the February 1984 budget. The Department of Finance estimates that 61 per cent of those making more than $50,000 a year take advantage of the RRSP deduction. Only 11 per cent of all other individuals are in a position to make use of this tax shelter.[12]

Clearly, on the question of cost, there are other programs that cost 10 times what paid parental leave would cost and that are targeted to a very limited number of higher-income Canadians. In the final analysis, it is not cost but what politicians feel the voters want that will determine whether a national system of fully paid parental leave will be implemented.

Since the program would still be largely financed by contributions from employers and employees, it might also be necessary to counter the inevitable arguments from the business sector that it could "not afford" such a program. As we have seen, the second most expensive option for which cost estimates were prepared would cost an employer an additional $1.33 a week for an employee earning at or above the maximum insurable earnings. Since many employees of small businesses earn less than the maximum, and small business has been the most vocal in its opposition to any expansion of the existing program, it is worth noting that a firm with only 10 employees would pay an additional $13 a week at the very most. It seems most unlikely that an additional $10 to $15 a week will put anyone out of business.

It must also be emphasized that there are costs involved in leaving the system the way it is now. There is the financial penalty imposed on parents by the existing program; the fact that even though such a high percentage of women of childbearing age are in the workforce working at full-time jobs, we are only prepared to give them benefits for a very brief period of time, and we make the implicit assumption that it is only mothers who must combine their work with their family responsibilities; and there is the burden imposed on parents and on children by allowing the current situation to continue.

These costs, unquantifiable in dollar terms, have received little attention in the current policy debate. But they may very well be costs that Canadian society can no longer afford.

Comments by Peter Hicks

The paper puts forward a carefully argued case for the use of UI as the vehicle for delivering parental leave in Canada. I would like to make some comments, first, with respect to the case that is made for extensions to our parental leave system and, then, to the use of UI as a vehicle for delivering parental leave.

The paper puts forward two arguments in support of parental leave. One relates to the role of parental leave in the full integration of women into the labour market. The other relates to equity, particularly with respect to equal treatment of men and women in their responsibility for the care of newborn children. There is also an equity issue in that many unionized employees receive maternity benefits from both UI and private plans, while other workers receive the UI benefits only.

The labour market integration argument presented in the paper is that existing arrangements, which appear to be less generous in Canada than in many other countries, result in a financial penalty to the labour market integration of women with children. However, the paper also correctly points to the dramatic increase in the labour market participation in recent years of mothers with young children. We are invited, I believe, to draw the conclusion that, for many women, the existing parental leave arrangements have not been a significant barrier to participation. This may be because existing arrangements, including UI often topped up by private plans, are adequate for many. Or it may be that parental leave is not a major factor in the decisions of many women with respect to labour market participation.

The case for parental leave on equity grounds therefore appears to be the more important of the two discussed in the paper.

A case for parental leave can also be made in the context of the more general search for flexible working life arrangements. It can be argued that labour market adjustment would be improved and unemployment reduced if there was more flexibility in such areas as retirement arrangements, part-time work, weekly hours, job sharing, and various types of leave. Parental leave is admittedly not a central element in this discussion. Nevertheless, there is increasing interest in working-time adjustment policies, and this might provide another useful forum for discussions of parental leave.

The paper also states the case against parental leave. Three arguments are discussed: that parenting is a private matter and society therefore has no responsibility for parental leave; that better leave arrangements would encourage women to have more children and/or participate more in the labour force; and that it would be costly.

The first two arguments are not strong, and the paper deals with them quickly and effectively. Emphasis is quite rightly placed on the cost argument.

We are talking about costly proposals. The full package would, according to my estimates, cost over $1.5 billion in current dollars (not the 1981 dollars used in the paper). This would be four times greater than the current cost of maternity benefits under UI. The proposal in the paper, of course, is not for immediate implementation of all aspects of the proposal. However, the cost of the various components, like increased benefits or increased duration of benefits, would run to hundreds of millions of dollars each. As the paper points out, these figures are perhaps not large in comparison with some social programs, but they are undeniably very large by most standards. And they seem especially large at a time of expenditure restraint. The fact that the maternity benefits have been improved considerably in recent years may be a factor for some. The changes introduced this year are estimated to cost over $100 million.

The paper also provides cost figures on a per-week-per-employee basis, on the assumption that the cost would continue to be paid by employers and employees. These figures seem small enough. However, it would be wrong to suggest that all employers and all employee groups would welcome increases of $0.30 or $0.40 per $100 of insurable earnings. An increase of only $.05 is subject to considerable debate and scrutiny in the present economic climate, and a good case can be made for keeping payroll taxes as low as possible, especially in a time of high unemployment. Payroll taxes add to the cost of labour and discourage employment growth.

The paper points out, however, that it is not necessarily employers and employees who must pay for all the costs of the program through payroll taxes. The government could also pick up a larger share, to be funded from general revenues. If this were the case, the government expenditures would have to be assessed in terms of its impact on the deficit and on alternative government expenditures in such areas as child care or training and counselling for women re-entering the labour market.

In short, cost considerations are most important, and the paper is right in devoting so much attention to cost and financing.

I would like to make a few final observations about the use of UI as a vehicle for delivering parental leave. The paper has pointed out the advantages. There are, of course, also some disadvantages. A number of bodies are strongly opposed to the use of UI for purposes that are not related to insurance. There is always tension between the main UI provisions and the quite different needs of parental leave. For example, there would be concern about the precedent of moving from 60 per cent of earnings to 95 per cent of earnings, as the paper proposes. Many would argue that an entirely separate vehicle for delivering parental leave would make more sense. Nevertheless, recent experience has proved that UI has been a relatively flexible way of providing maternity benefits, and there can be no doubt that further improvements are possible, consistent with the realities of expenditure restraint and financing.

In this regard the timing of the paper is opportune. The Agenda for Economic Renewal, which was tabled by the Minister of Finance at the time of the recent Economic Statement, called for a review of UI. This may provide an opportunity to review the type of options put forward in this interesting and balanced paper.

Floor Discussion

Ms. Townson was asked a variety of questions about her proposal for a paid parental leave system. The cost of implementing such a program interested a number of participants. One expressed doubt that expenditures amounting to approximately $1.5 billion (by Ms. Townson's estimate) are feasible, given the current high federal deficit. Ms. Townson responded that the program would be financed entirely by employer/employee contributions through the UI program, as is presently the case for maternity benefits. Costs of the program would fall, therefore, not on government but on the economy as a whole. Policy makers will have to decide how these costs should be shared, Ms. Townson said.

Interest also focused on the concept of parental – as opposed to maternity – leave, triggered by the comment that better leave benefits might discourage employers from giving high-level jobs to women of childbearing age. Ms. Townson pointed out that a parental leave program is designed to avoid that situation. When the emphasis lies on sharing family responsibilities, she observed, any discrimination would have to be directed against both parents of childbearing age rather than against the mother alone.

A number of participants commented on the concept and viability of parental leave. One observed that although Sweden has a progressive program under way, the take-up rate among Swedish males is very low. Another argued that the current participation rate of fathers is irrelevant; rather, the key concern is to establish the principle that parental responsibility should be shared. Still another participant placed this issue in the context of women's "double burden" of job and home responsibilities. Her research on housework and women's labour force participation, she said, suggests that men contribute only slightly to household responsibilities, and that only through increased services for food, housecleaning, and laundry will the working woman's burden be reduced.

Ms. Townson agreed wholeheartedly with the need to affirm the principle of parental leave and stressed the importance of not erecting barriers against the participation of fathers. She added that, in her view, women's load will be lightened most effectively through the reduction of working hours for all workers, enabling both parents to spend more time on household chores.

Mr. Hicks noted that a negative aspect of using the UI system for this kind of program lies in its built-in notion of incapacity, a concept at odds with the positive value of parenthood. He added, however, that the UI system has proved flexible in the past and, presumably, can be so again in the future.

The role of unions in achieving better leave programs was discussed as well. One participant remarked that Ms. Townson's report did not mention the success of the collective bargaining process in obtaining and improving upon maternity benefits. Another drew attention to progressive legislation passed in Quebec in 1980, giving public-sector workers 20 weeks of paid maternity leave at 90 per cent of salary.

Ms. Townson said that while space constraints prevented her from raising the question of unions in this particular paper (although she had done so in others), she was aware of, and applauded, the Quebec legislation – which, she noted, covers 200,000 workers or one-fifth of the female labour force in Quebec. She observed that the fully paid parental-leave option was developed by trade unions in Canada, and that existing provisions granting workers fully paid maternity leave were negotiated through collective agreements. She emphasized, though, the need to progress beyond present ad hoc arrangements to a national system.

Mr. Hicks added that the UI system has been structured to encourage supplementary benefits, such as the full maternity benefits negotiated by unions.

4 Occupational Diversification of Women in the Workplace

Presentation by Jac-André Boulet

Many authors attribute the earnings gap between male and female workers to the large concentration of women in a limited number of occupations. One U.S. study reveals that this factor alone accounts for almost 40 per cent of the earnings gap. The result is an excess supply of labour in certain occupations, leading in turn to lower wages and poorer working conditions. The effect might be even greater if occupational classifications could be refined to the extent of grouping together only those positions involving the same skill requirements and the same duties.[1] In light of this fact, it would seem that a more diversified occupational structure for women would not only bring their earnings more into line with those of men in the labour market as a whole, but also lead to improved working conditions in occupations where women largely predominate.

It should be added that women are often concentrated in occupations or sectors where productivity is low. This indicates the impact that occupational diversification of the female labour force has on women's working conditions.

The data available bear out these observations.[2] In 1980, the average hourly wage of women was 72 per cent that of men. Generally speaking, however, within each occupation, the gap was smaller. For example, based on the average wage differential among the 22 major occupational categories, the proportion works out to 78 per cent. If the same calculation is made using a 73-occupation breakdown, the average hourly wage of women is nearly 79 per cent that of men. By disaggregating the data further, the gap narrows gradually though more and more slowly; it does not disappear completely, however. No matter what occupational breakdown is used, an earnings gap in favour of men persists. This somewhat unorthodox method of calculating the wage gap between men and women eliminates the impact of differences in occupational distribution and illustrates the importance of occupational concentration.

This chapter examines briefly the changes that occurred in the occupational diversification of women between 1971 and 1981, identifies the groups that contributed most to that phenomenon, and discusses what the future holds in store if present trends continue, as well as some measures that can be taken to encourage change in this area.

The Present Situation

There are two ways that occupational diversification can take place: (1) when women enter traditionally "male occupations" – i.e., occupations where men account for 50 per cent or more of the workers; and (2) when men enter traditionally "female occupations" – i.e., occupations where women make up 50 per cent or more of the workers.[3]

These two processes can operate simultaneously (which increases the possibility of a more rapid occupational diversification); or only one or the other may come into play, as is currently the case. During the 1970s, of the net increase in the male labour force, less than 7 per cent occurred in occupations that were female-dominated in 1971, whereas 44 per cent of the increase in the female labour force occurred in male occupations.

In 1971, nearly 1 million women (36 per cent of the female labour force) were working in fields dominated by men, while almost 5 million men (91 per cent of the male labour force) were in the same occupations. As long as the number of working women grows faster than the number of men (which should be the case from now until the year 2000, at least) and as long as women continue to enter male occupations in at least the same proportion as observed in 1971, it follows that these occupations will become less and less male-dominated. In fact, however, female diversification actually accelerated between 1971 and 1981. First, the age structure of the female labour force changed over the decade. If that structure had been the same in 1971 as in 1981, the proportion of women in male occupations would have been 35 per cent instead of 36 per cent. Second, when this figure is applied to the 1981 female labour force, one finds that the number of women in those occupations should have been 1,549,000, whereas the actual figure was 1,721,000 – a difference of 172,000 – which shows that the diversification movement is picking up speed.

This analysis suggests that the 789,000 women who entered male occupations between 1971 and 1981 can be divided into two groups: 617,000 (78 per cent) whose presence maintained the process of diversification at its 1971 level of 36 per cent, and 172,000 others who boosted the process to the actual level of 39 per cent. This line of reasoning demonstrates that the occupational diversification of women includes two trends: (1) a natural or automatic rise caused by the fact that more women are entering the labour market than men and that a significant proportion of them choose traditionally male occupations, thus progressively eroding the degree of male dominance in those occupations; and (2) an additional increase resulting from the fact that women are choosing such occupations more often and are orienting their training towards such fields more strongly than they did in the past.

Once the diversification process is under way, it generates its own momentum, and the pace can easily quicken as larger numbers of younger women break with tradition and enter occupations previously considered male preserves. This is exactly what occurred between 1971 and 1981.

According to our research, a comparison of the situation in 1971 with that in 1981 reveals that the proportion of women under 40 years of age working in male occupations increased significantly, while the proportion of women aged 40 years or over generally remained unchanged or tended to decline. The greatest contribution to diversification was actually made by women between the ages of 20 and 30. This supports the hypothesis that women who return to work or who enter the labour market late in life tend to choose traditional female occupations.

An analysis of these changes brings to light three noteworthy facts. First, in general, the greater the male dominance in an occupation in 1971, the greater was the tendency for women to enter that field during the following decade. Second, female earnings increased the most in male occupations – 182 per cent between 1970 and 1980 (almost 11 per cent a year, at a compounded rate), compared with 158 per cent in female occupations (an annual increase of 10 per cent, compounded). This means that, by 1980, women working in traditionally male occupations enjoyed average incomes that were slightly higher than those in traditionally female occupations, whereas the reverse had been true in 1970.

Third, not only have women made considerable progress in terms of occupational diversification, but also the greatest gains have been made in the highest-paid occupations. For example, in the 20 highest-paid occupations, the number of women quadrupled, while men only doubled their numbers. Even though these women were for the most part relatively young (which was reflected in most occupations by a decrease in the average female age), their earnings as a proportion of those of men, adjusted for hours worked, rose from 54 per cent in 1970 to 65 per cent in 1980. This represents a tangible improvement, although it must be said that the initial disparities were substantial.

On the other hand, the number of women working in occupations at the other end of the pay scale – the 20 lowest-paid occupations – increased significantly. But here the effect was mitigated by the fact that male and female wages in those occupations were closer to begin with. After adjusting for hours worked, the average female earnings in those occupations in 1970 were 71 per cent of those of men, rising to 74 per cent in 1980.

This illustrates how complicated the issue really is, since gains in one area are often offset by losses elsewhere; if these two elements are not carefully distinguished, the inevitable conclusion is that women made little or no progress between 1971 and 1981. In-depth analysis, however, reveals that a significant number of women managed to climb to the upper echelons, in terms of both prestige and earnings. This means that policies designed to aid women in this quest have a real chance of succeeding.

In addition, there is nothing to indicate that women entering the labour market during the 1970s made poorer job choices than men. This can be seen by examining changes in the relative order of occupations according to the average hourly wages of men and women *combined*. Over the study period, 30 per cent of women and 29 per cent of men entering the labour market selected occupations where the relative earnings stayed the same or improved.

Nor is there any reason to believe that women are massively taking over jobs that men are leaving. Only 8 per cent of women entering the labour market chose occupations where the relative number of men dropped during the 1971-81 period. Nearly 60 per cent of female entrants chose occupations where the relative number of men also increased. At the beginning of the period, women made up 23 per cent of workers in those occupations; by 1981, that figure had climbed to 30 per cent.

These advances place Canada in an enviable position relative to other OECD countries. A study by the International Labour Office compared the occupational distribution of the female labour force in seven countries.[4] The study found that the "professional and technical" categories and the "management and administrative" categories accounted for 24 per cent of working women in Canada, compared with 21 per cent in France and the United States, 17 per cent in Australia, 15 per cent in West Germany, and 13 per cent in Italy and the United Kingdom.

The Outlook

By combining projections of labour force trends to the year 2000 with the data analysed above, it is possible to predict how male occupations will change as they become "feminized" over the next 15 years. The low projection assumes that 1.9 million women will enter the labour market between 1981 and 1990 and 1.1 million during the following decade. The high projection assumes that these figures will be 2.1 million and 1.5 million, respectively. In the case of men, it is assumed that 1.6 million and 0.5 million, respectively, will enter the market during these two periods.[5]

During the 1971-81 period, 44 per cent of women entering the labour market opted for occupations that had been dominated by men in 1971. At that time, women had accounted for 16 per cent of workers in those occupations. By 1981, their representation was 23 per cent. If diversification continues at this pace until the year 2000, women should account for almost 29 per cent of the workers in those occupations according to the low projection and for 30 per cent according to the high projection. However, considering trends now evident in educational institutions, it can be readily conjectured that the proportion of women entering occupations that were male-dominated in 1971 will exceed 44 per cent, thus surpassing the above figures.

If the trend towards greater occupational diversification within the female labour force continues, a labour market with progressively fewer male occupations will emerge, as male dominance falls and greater numbers of women choose to enter these fields. A certain number of occupations where female numerical superiority persists will remain, however, simply because large numbers of women will continue to enter those occupations while men will not.

Progress may seem slow. For example, if every woman entering the labour force between now and the year 2000 were to choose a male occupation, even the high projection would bring the overall representation of women in those occupations to only 35 per cent.

In short, even though women have made significant gains in terms of occupational diversification, there is still a long way to go before their representation in all occupations is the same as in the labour force as a whole. The reason for this situation is twofold.

First, some of the occupations that women continue to enter are already heavily female-dominated and are expected to remain so for a long time to come, since few men will enter them in the foreseeable future. Unless it is a question of personal preference, it is not in the best interests of either men and women to enter these occupations, since this would only worsen the situation of excess labour supply that often exists in these fields. This would tend to keep wages at their present low levels or perhaps reduce them even further. This is why we feel that it is preferable to orient research primarily towards traditionally male occupations and the increased number of women taking on such jobs.

Second, as far as the future is concerned, indications are that occupational diversification will accelerate as older female workers are replaced by younger women who in turn will later be replaced by younger women, each successive generation displaying a greater propensity for occupational diversification. Moreover, technological advances are expected to reduce the number of traditionally female occupations available, and this will encourage women to move into traditionally male occupations or into new positions where neither sex will predominate. Indeed, there is no reason why new occupations and careers created as a result of technological change should be dominated by either men or women. As long as manpower training programs and other government initiatives in this area manage to remain unbiased, occupational polarity of this kind can probably be avoided.

And it is possible, in light of women's greater labour market participation, that those women who continue to enter female occupations will be more likely to stick to their jobs than was previously the case. Consequently, the turnover rate in these occupations may drop in the future, which in turn may lead some women to select other occupations.

Women are increasingly diversifying their job choices and selecting occupations – particularly in the professional and managerial fields – that have traditionally been male-dominated and better-paid. While women continue to be concentrated in the lowest-paid occupations, the wage gap has narrowed both at the top and at the bottom of the pay scale.

Despite these promising changes in female occupational diversification, the pace of progress must be stepped up through programs in place as well as through new initiatives. For if we rely solely on young women entering the labour force to bring about major changes, then economic parity with men will remain a long way off. Initiatives to assist women already in the labour force and those intending to return is the key to accelerating the rate of change. It is to this issue that we now turn our attention.

Policies Favouring Occupational Diversification

Over the last 15 years, faced with evidence that the low level of occupational diversification among women is a major factor in the continuing existence of a male/female earnings gap, governments have implemented a series of measures designed to encourage women to pursue their education and to diversify their areas of specialization. In this they were supported by various organizations, particularly women's groups. The accent on diversification did not appear until the late 1970s, however.

There are three groups targeted for these measures: young women still in school, housewives who want to return to the labour market or enter it for the first time, and working women who would like to continue their education or to enter a new speciality.

Employment and Immigration Canada (EIC), as part of its National Training Program, has undertaken four kinds of measures to promote diversification. First are the measures relating to the National Training Program as a whole that require that the EIC's regional offices set targets for the proportion of women studying in nontraditional fields and that Canada Employment Centres offer women counselling and information services to help them reach decisions on whether to take courses in nontraditional areas. Second are the measures that apply to institutional training, whereby the EIC gives women priority for 30 per cent of the places in technical courses in areas identified as nontraditional occupations. The number of occupational orientation courses has also been increased. Some of these courses are designed to acquaint women with working conditions in nontraditional occupations. In cooperation with the provinces, EIC has also helped prepare units for courses in mathematics, science, and introductory computer science specifically designed to meet the needs of women. Third come measures that concern industrial training, whereby employers would be reimbursed for 75 per cent of the wages for women training in nontraditional occupations and up to 100 per cent for women training in specialized, technical, and certain managerial fields. Fourth, EIC has also used the Skills Growth Fund to encourage provincial institutions to extend assistance for the creation of women's training centres and to encourage women's groups in the establishment of private nonprofit organizations dedicated to expanding Canada's ability to train women for positions of national importance (which are usually nontraditional) and to responding to women's special needs.

To assess these initiatives fairly, some points should be made. While the policies aimed at young women in educational institutions are covered in another chapter, it must be pointed out here that this is the group most likely to spearhead any lasting changes in the male/female earnings gap. The fact is, the relative absence of women is particularly noticeable in the higher-earnings brackets. While their numbers increased almost sevenfold in the $20,000-and-over bracket (1980 dollars) between 1970 and 1980 and the number of men simply doubled, only 8.4 per cent of women were earning over $20,000 in 1980, compared with 36.5 per cent of men.[6] The kinds of skills and expertise required for a job in this income bracket are usually acquired more easily through institutional studies – particularly at the university level – than through manpower training programs.

The preceding argument is not meant to deny the importance of manpower training programs, but simply to point out how far we still have to go in this area and how important it is that we move beyond such programs if the economic status of women is to be improved in the near future. Manpower training programs do play a useful role by ensuring that women's labour force characteristics are in tune with the needs of the labour market, by helping to avoid manpower surpluses and shortages, and by cushioning the impact of technological change. In this way, these programs help reduce the male/female earnings gap or at least prevent the situation from growing worse. They are less useful, however, when it comes to the higher-paid occupations. Here, the educational system, skill development leave, and adult education are the important tools, along with salary adjustments in certain female occupations. This hypothesis is not without foundation, since – to the extent that comparisons are possible – women have been paid less than men and have been let go more often than men, ostensibly because employers have not considered them as the primary breadwinners of their families. Could it be that occupations considered to be "women's" jobs have been stamped by this same train of thought and that this is why these occupations have been and continue to be low-paying?

Despite the importance of occupational diversification, however, the elimination of the male/female earnings gap does not necessarily require that workers of both sexes have identical diversification patterns. This is only a sufficient condition, not a necessary one. There are many arrangements of occupational diversification leading to equal wages for men and women that do not involve representation in all occupations according to the respective labour market shares of the two sexes. Occupational diversification is not a goal to be pursued at all cost. For example, women gain nothing by expanding into male-dominated fields that offer low earnings. Nor do men gain anything by choosing traditionally female occupations that already have an excess supply of labour. In fact, there is nothing inherently wrong with a particular occupation being either highly male- or female-dominated, as long as this is the result of free choice based on unbiased upbringing and as long as the wages in these occupations reflect current market values.

The above observation is important in view of its bearing on how hard and how far diversification should be promoted. Since the elimination of the earnings gap does not require that men and women have similar occupational diversification profiles, then policies designed to encourage diversification do not have to be aimed exclusively at occupations where men predominate. Until the spring of 1984, an occupation in which women held 10 per cent or fewer of the available positions (according to 1971 Census data) was classified as male-dominated or nontraditional and was thus singled out for special assistance. The application of this policy was limited to specialized, technical, and certain managerial occupations.[7] Now, the criterion is 33 per cent or fewer (1981 Census data) of the positions being held by women.

A highly restrictive approach certainly has its merits; it can produce impressive symbolic results that, in the long run, can in turn encourage more women to take the road pioneered by their predecessors. On closer examination, however, the results can be deceiving. For one thing, the response of women to efforts in this area has been quite poor. From the time the program was set up in 1980 until 1983, only 4,373 women participated in nontraditional training programs[8] and only 6,539 in nontraditional institutional training programs.[9] In addition, our research on occupational diversification indicates that, as a general rule, few of the women who enrol in the various manpower training programs opt for male occupations.[10] Moreover, according to other sources, it appears that many women who do opt for training in those areas do not continue using their training after they enter the labour market. Many factors can account for this situation, notably differences in upbringing between male and female children. Other probable factors include employers' recruitment, training, and promotion procedures and the fact that, after all, women have few role models to follow in pursuing such careers. Some positions are incompatible with family responsibilities, especially those requiring frequent overtime work or extended absences from home, those where part-time work is not possible, and those where long-distance moves are common. The way in which family responsibilities are still shared between the spouses often works to women's disadvantage.

There is no doubt that occupational diversification must be encouraged if the economic status of women is to improve, since many female occupations have an excess supply of labour and offer low wages. In general, however, women should be encouraged to pursue their training or direct it towards occupations where working conditions and wages are expected to be better in coming years than the average for the labour market as a whole, regardless of the relative numbers of men and women. Our work indicates that a high proportion of women returning to the labour market opt for training in fields where there is already a surplus of labour, such as bookkeeping, accounting, sales, and cashier work,[11] while there are sometimes regional labour shortages in certain relatively well-paid female occupations. The case of nursing is noteworthy in this regard: the risk of labour shortages in this field is rising as the Canadian population as a whole grows older and the need for health services continues to increase.[12]

Also, these training programs should not be directed towards horizontal diversification only – i.e., in male occupations – but towards vertical diversification as well – i.e., in higher job ranks where promotion is based on better training. In a sense, this is also a form of diversification into male occupations, since positions of greater responsibility are usually occupied by men. Indeed, in many cases, women hold jobs where they could easily advance, if given the chance to improve their qualifications, without having to change jobs or directing their education towards a traditionally male occupation. A number of current training programs have adopted this approach. Adult education and skill development leave are also useful in this regard. There remain, however, various barriers that make reaching such goals more difficult for women than for men. We return to this topic later.

Some Suggestions

The surest route to lasting improvement in the economic status of women is through education, particularly more advanced and diversified education at the university level. This route will enable women to offset more easily their relatively small numbers in the higher-income brackets.

There are, however, other, more permanent imbalances between labour market needs and workforce characteristics, which may not necessarily be corrected by conventional education. Moreover, we are entering an age where manpower recycling and retraining are becoming an ongoing process. Government-sponsored programs, skill development leave, and adult education all have essential roles in balancing labour supply and demand.

Over the last two decades, women have manifested a desire to participate actively and regularly in the labour market and to attain a greater degree of financial self-sufficiency. However, their poor preparation for paid employment and their extended absences from the market have often hampered their entry or return to the labour force, where they often end up in low-paying jobs with few prospects for advancement. Nevertheless, times are changing, and some progress has been made. Training programs have been set up and the creation of a National Educational Leave Program is envisaged.[13] Meanwhile, there persists an underutilization of talent and resources that, while it affects women the most, penalizes Canadian society as a whole.

Women are faced with problems that men do not have to confront – at least, not to the same degree. In many cases they have received less training than men in preparation for paid employment, and their occupational choices based on that training are much more limited. Very often, family responsibilities have forced them to leave the labour market or to never enter it in the first place, and the quality of their training suffers as a result. Also, because sexual stereotyping has led them to place less emphasis on training in mathematics and science, they are ill-equipped to face technological change.[14] Finally, women are less likely than men to be tied into the information networks that could give them valuable information on employment possibilities and on ways to make the best possible use of their labour skills.

The existence of these and many other barriers[15] means that the female labour force is not being utilized in an efficient way. It is interesting to note that, as a general rule, women work fewer hours than men for the same earnings level[16] – another indication that their abilities are not being fully utilized. Because women face barriers that men do not, this situation calls for the various manpower training programs to be deliberately biased in their favour through affirmative action that should not be applied simply through a quota system.

One of the first steps to take towards a better correlation of the needs of the marketplace with the aspirations and abilities of women is to make improvements to the measures already in place, with the primary objective of stemming the recent drop in the number of women participants in the various training programs offered by the Employment and Immigration Commission.[17]

1) Increase monetary assistance to ensure that, at the very least, women participating in these programs, as well as their families, are not faced with a reduction in their standard of living.

The allowances currently available are much too low to provide a serious incentive for women to participate in these programs. If they have dependants and receive welfare benefits, it is often more advantageous for them to stay at home in light of the costs involved in returning to school, the uncertainty of finding a job afterwards, the low wages they can expect if they do decide to enter a female occupation, and the difficulties involved in getting back on welfare assistance should things not work out.

If a woman lives with her spouse, the allowances are considerably lower. Very often, women in this situation find that it makes more sense to get a job as quickly as possible, usually a low-paid one, than to face the various costs involved in returning to school, such as daycare services. Women who receive unemployment insurance benefits usually get lower benefits than men, since their former wages, on which basis benefits are calculated, are generally lower. As of August 1984, candidates can choose between receiving unemployment insurance benefits or the allowances provided by the training programs, whichever is higher. Only a handful of women will benefit from this measure, however.

2) In the context of efforts to promote diversification into nontraditional occupations, broaden the definition of such jobs to include any occupation where the proportion of men exceeds 50 per cent, targeting in particular those occupations which offer wages that are higher than the average market wage and significantly higher than those offered by other traditionally female occupations requiring the same educational effort.

Our research has shown, for instance, that women who work as machinists, truck drivers, mechanics, or construction workers do not receive any better wages than they would if they worked as secretaries, stenographers, or typists. The monetary incentive to enter the former group of occupations is very low. Moreover, working conditions are often more attractive in the latter group.[18]

3) Improve counselling services in two ways: (a) by providing counsellors with all the necessary information on labour shortages and surpluses and on wage rates in all occupations, in order that candidates can make informed choices; (b) by following the U.S. lead in giving recognition for experiential learning acquired outside the labour market to women who seek help in making appropriate job choices and in planning programs of study that complement previous experience, by giving them course credits towards a training program.[19]

4) Establish a national educational leave program. Women will need such a program very badly over the next few years, since they tend to be more severely affected than men by technological change. Particular attention must be focused on women working part-time, since they are even more likely to be affected by changes of this kind.[20] In addition, special attention must be paid to the program's entrance requirements so that women have the same opportunities as men to participate.

5) Step up the design and implementation of program modules in mathematics, science, and computer science, as agreed to by the Employment and Immigration Commission and the provinces, in order to meet the special needs of women, with programs that take account of the extra distance that women must cover because of their historical low level of interest in such subjects, compared with men, as a result of traditional socialization patterns.

6) Set up a better system of follow-up for women who enter nontraditional occupations and conduct research to determine why some women enter and succeed in such occupations, in order that other women may follow in their footsteps. This is one way to avoid the failures and waste of talent that are currently apparent.

7) In order to encourage the abandonment of stereotypes in recruitment, training, and promotion policies, companies that receive government contracts or grants should be urged to examine their employee representation by sex, wage structure, and position and to present a written report to the appropriate level of government. This will help make businesses more aware both of the size of the various gaps that separate men and women and of the urgent need to correct them.

8) Finally, in a more general context, take steps to ensure a more equal division of family responsibilities so that a wider range of occupational choices will become available to women. Parental leave, better child care services, and improvements in hours worked and working conditions are all examples of such measures.

Comments by Roslyn Kunin

I am not sure whether it is very difficult or very easy to comment on Jac-André Boulet's chapter, since I definitely agree with the basic premises and the conclusions presented by the author. Certainly it is obvious, to all those who have paid attention to the subject, that women have by no means yet attained any degree of equality in the labour market. It is also obvious that the question of occupational distribution is one of the main reasons why the discrepancy remains. This is true whether one uses the classical market model of the labour market (which results in an excess supply of labour considering that most of the female labour force is concentrated in a very small number of occupations) or a Marxist-type model treating women and other secondary workers as a reserve army of labour.

It is also true that formal education and training are definitely one means that is necessary (but, as I shall show later on, not necessarily sufficient) to help women attain greater equality of earnings in the labour market.

It is my general contention that for anyone to earn consistently an income that regularly exceeds $20,000 a year and also to maintain regularity of employment, a significant amount of postsecondary education, especially for women, is necessary, usually in the form of a university degree. As was pointed out in Jac-André Boulet's chapter, the vast majority of women have not yet attained this income level even though a significant proportion of male workers have.

Therefore, I am in basic agreement with the premises of the chapter presented and with the suggestions to help alleviate the situation.

Given my position as Regional Economist with the Canada Employment and Immigration Commission, I am particularly in agreement with those subjects that relate to emphasis on the various training programs and other special measures concerning employment of women in nontraditional occupations that our Commission includes among its programs.

Nevertheless, there are several additional points that have been touched upon in the chapter and a few strategic omissions that are worthy of further emphasis. Therefore, in my comments, I would like to dwell on these. The main points I would like to cover are: (1) the treatment of education as a panacea by which to alleviate the unequal distribution of women within the labour market; (2) the distribution of women within occupations and their earning power in a given occupation; (3) the effect of family status on women workers and their earning patterns; (4) the effect of the current state of the economy (and recession is not too strong a word); and (5) the impact of technological change on women in the labour market.

As a result of my comments, I will then conclude with some additional suggestions to help women achieve a better distribution of income and earnings in the employment market. These are suggested as a supplement to, and not a replacement for, the suggestions made in the original chapter.

As an academic myself, and one with over eight years of postsecondary education, I would be the last one to decry the value of formal education in our various schools, colleges, universities, and training institutes. Nevertheless, education is sometimes seen to be more of a panacea than it actually is. This overemphasis is frequently adopted more by women than by men in our labour force. This is shown by the often-quoted statistics demonstrating that women in the population overall tend to have more years of schooling and higher levels of educational attainment than males, for less reward. Statistics from the 1981 Census show that women with a university degree earn only $876 per annum more than men with a high school diploma and over $10,000 less than men with a university degree ($21,005 to $31,179). However, women with only high school education earn just $12,756 compared with $20,129 for similarly educated men. Also, Ornstein's research[21] has shown that women gain significantly less from education than do men.

In a study on women in management it was discovered that even those relatively well-educated women did not tend to rise nearly as quickly as their male colleagues.[22] This is not news (and is confirmed by other research),[23] but what is significant is women's reaction to their lack of career advancement and the steps they took in order to encourage and facilitate their own career progression. Almost inevitably, women relied upon additional formal education and training, even when they already were more educated and had obtained and been recognized for far more formal qualifications than their male colleagues who were rising more quickly. In fact, women have tended to revert to the values of their schoolgirl years by returning to the dependent mode of the classroom for additional paper qualifications long after such qualifications had begun to provide them with significant diminishing returns. This is often done at the expense of learning specific on-the-job managerial skills including, particularly, the interpersonal qualifications and the "small p" politics that are so necessary for advancement and organizational survival at higher levels of managerial, and indeed most professional, positions.

This leads me to my second point, which indicates that occupational diversification for women may not, by itself, be adequate to solve their labour market problems. This is confirmed by a very important and seminal study by Devereaux and Rechnitzer.[24]

The study demonstrates that when women have the same educational qualifications as men and are entering the same occupational field, the income gap, while still in favour of men, is relatively narrow at the entry level. Nevertheless, over time and for a given number of years of experience in the field, the gap gets significantly wider, so that after about eight years the women in the field with comparable qualifications and years of experience are earning approximately 60 per cent of what their male colleagues are earning, thereby maintaining the traditional differential between male and female earnings that was originally mentioned in the Bible and which has remained remarkably persistent ever since. This fact is also confirmed by Ornstein's more recent work.[25]

Some additional research was done recently on the income effects of middle-aged women moving into nontraditional occupations in the United States.[26] The research was cross-sectional over a large number of women, and hence the results may differ from longitudinal studies following women through time. Nevertheless, it showed that the increase in income for white women moving from occupations that were at least 90 per cent female to those that are at least 90 per cent male is only 8 per cent.

This again reinforces my thesis that while women without education and occupational diversification from their traditional fields will never gain equality, merely entering the appropriate occupations without doing something to help alleviate the differing returns to education and experience between men and women as they continue in the occupation will not, in itself, solve the basic problem.

The issue of family structure and family responsibilities is one that is frequently mentioned in connection with women's performance in the labour market. It is referred to in Mr. Boulet's chapter as well. Frequently, the thesis is presented that because women have family responsibilities, usually disproportionate to those of men, they are not in a position to make an equal contribution in the labour market. Their interests and energy are thought to lie elsewhere, and/or they are less mobile geographically and with respect to the hours and shifts they can work.

A very interesting hypothesis based on this premise was presented in a study by Block and Walker.[27] In this study, it is maintained that the major reason for discrepancies between male and female incomes and earnings is the fact that women have different family responsibilities. To demonstrate this hypothesis, the study attempts to show that the wage discrepancies almost completely disappear when one compares never-married men with never-married women in the labour force. Even for these groups, however, women were only earning 90 per cent of the wages of men.

What that study neglected to point out was that the never-married women were older, had more experience in the labour force, and were significantly more educated than their never-married male colleagues. Also, in our society, women traditionally tend to marry "up" – that is, to men who are older, more educated, and generally of higher status than themselves, while men tend to marry "down" to younger and less educated women. Therefore, women who never marry tend to be those at the upper end of the distribution for income, education, status, and even height, while never-married men often tend to be those with lower status, health, education, employment prospects, and so on. In spite of the fact that the never-married people in our society are likely to include the women with the best employment prospects and the men with the least, the income distribution was still in favour of the men.

Given the demonstration, one would not automatically think that it is solely the additional family responsibilities traditionally laid upon women that lead to their negative position in the labour market. An interesting critique of the Block/Walker study and some additional research leading to contradictory results have been done by Denton and Hunter.[28]

Mr. Boulet, in his chapter, refers to the fact that women suffer from lesser earning abilities because family responsibilities do not allow them to participate in certain jobs, such as those involving shift work. It has always struck me as very significant that women's inability to do shift work or to otherwise be flexible in the labour market is always mentioned as an explanation for their lower earnings, while one of the most significant and most traditionally female occupations is nursing in which shift work plays an extremely integral part. I have never heard it suggested that women should not be involved as nurses, or indeed that men should enter the field because of the necessity to work nights and weekends on a regular basis in this important and responsible occupation!

I now move to an issue that is close to the surface in the thoughts of an economist like myself – namely, the general state of the economy. It is fairly obvious that since the beginning of this decade, the Canadian (if, indeed, not the developed world's) economy has been in a period of decline. Furthermore, many observers do not feel that this condition is likely to come to an end in the very near future. The result of this is that supply is exceeding demand for labour in virtually every occupational area, including those where we have had long-standing shortages such as in engineering or the blue-collar, skilled trades. The position of women will be hard to ameliorate as long as there is an excess supply of labour.

A prime example is the profession of law. This has historically been one of the higher-status and higher-income professions. Recently, a very significant proportion of women have been entering law classes, graduating therefrom, and entering the profession. Nevertheless, in spite of the fact that the total number of lawyers being graduated is relatively fixed by the number of places in the universities, we now seem to be suffering from an excess supply of lawyers, with the result that it is very difficult to obtain articling positions, regular employment upon completion of articles, or indeed any degree of comfortable income in the highly competitive field of private law practice. This would be true regardless of whether the law classes were 100 per cent male, 100 per cent female, or any combination in between.

As women seek to enter, or are encouraged to take training in, what for them are nontraditional occupations, the very fact of the economic slowdown is going to exacerbate their chances. Some employers are reluctant to make changes under the best of conditions, so they will be even more reluctant to hire new and relatively inexperienced women in nontraditional fields when they have backlogs of experienced, educated, and long-service male workers still to be absorbed from earlier layoffs.

Exacerbating the problem of current excess supply in the nontraditional fields, where we hope women will enter in order to improve their position in the labour market, is the problem of technological change, which is, in itself, increasing the excess supply in the traditionally female fields. Many works, such as the one by Menzies,[29] for example, have very dramatically demonstrated that the traditional pink-collar clerical and service work, which has absorbed up to two-thirds of female employment, is increasingly being affected by the new automated technologies, of which word and data processing are the prime examples.

It has been said that every word processor and its operator replaces four traditional clerical positions. Increasingly, more and more work in fields such as offices, banking, insurance, and so on, has been rendered more productive by the new technology available. Of course, the definition of improved productivity is "increased output per worker," which means that fewer workers are required for any given volume of product being produced.

This means that not only will there be a pull factor of women into nontraditional occupations by greater employment opportunities and the prospects of higher wages, but there will also be a push factor from the traditionally female occupations as increasing amounts of excess supplies of labour and increasing reductions of opportunities are made evident by the accelerating impact of rapidly changing technology in the field of white-collar work, which to date has not been dramatically changed for many decades.

In closing, and for the reasons mentioned above, I would like to iterate the concerns that I mentioned at the start of these comments – namely, that increased formal education and occupational diversification alone are very necessary but could well not be sufficient to improve the position of women in the labour market.

An example to justify my concerns would be the case of women doctors in the USSR. Traditionally, in

Russia, medicine was a fairly high-status, fairly highly paid, and predominantly male profession. After the revolution, the profession became increasingly female, increasingly low-status, and increasingly low-paid. Nowadays, a medical doctor in that country has an income level and status equivalent to that of an elementary school teacher. Closer to home would be the example of pharmacists. A generation or so ago, a pharmacist was considered a professional and an entrepreneur with a status somewhat below, but not significantly different from, that of a dentist. Since that time, the distribution of men and women in pharmacy has changed, so that now the proportions are roughly 50-50. However, the current status of pharmacists is that of fairly well-trained technical employees in the pay of the large, frequently international, drugstore chains – working shifts, and probably more closely related to clerks selling other products in the drugstore than to members of the independent medical professions.

Therefore, in addition to the recommendations presented in Mr. Boulet's chapter, which I endorse, I would like to make the following suggestions.

First, in addition to formal education and occupational diversification, women need to learn the less formal, political, and attitudinal factors that will enable them to rise within occupations and help close the earnings gap between themselves and their male colleagues. For this I would suggest the information contained in such books as *Games Your Mother Never Taught You*[30] as much as additional formal college and university courses.

Finally, in order for women to improve their position in the labour market, it is necessary for the labour market to improve. Therefore (and I realize that it is much easier said than done) any steps that are necessary to help improve the general overall economy and the labour market within it will have to be undertaken before we can hope to see sufficient progress in the position of women in the labour market of this country.

Floor Discussion

The question of training programs for women, particularly in nontraditional occupations, received considerable attention in the discussion following the two presentations. One participant wondered why decreasing numbers of women are entering federal government training programs. Ms. Kunin explained that even though Employment and Immigration Canada reserves places for women in nontraditional training programs, few enrol, and many who do subsequently drop out. In her view, at least part of the problem stems from the way women regard nontraditional occupations. Better career counselling at the high school level would help to change this attitude, she said.

Another participant observed that past experience has shown – as in the recent case involving Canadian National Railways – that women equipped with nontraditional skills meet with hostility from their male co-workers. She conjectured that government intervention to ensure women access to certain occupations or, alternatively, the enforcement of affirmative action and equal-pay principles might be required to change this situation.

Mr. Boulet agreed that women appear to be encountering difficulties in nontraditional work areas and stressed the need for research on this subject – particularly in terms of charting the progress and difficulties faced by women entering these occupations. He added that, in his opinion, occupational diversification should not be pursued at any cost. For example, women should not be attempting to enter male-dominated occupations where working conditions and/or salaries are poor.

Another participant, in a further comment on the Canadian National incident, noted that when the company introduced measures to stop discrimination, working conditions for women improved considerably. He also observed that the current economic slowdown might facilitate the integration of women in nontraditional areas, contrary to Ms. Kunin's view. Since only a few women will be hired during this period, he reasoned, it will be easier to follow and promote their progress. Again with the economy in mind, another participant suggested that the impact of the recession on women – in terms of unemployment, welfare, and so on – is a deserving subject for future study.

Several participants discussed Mr. Boulet's evidence of increasing occupational diversification in certain areas. One referred to statistics cited by the ILO in a paper mentioned by Mr. Boulet, which suggest that 25 per cent of women in the workforce hold high-level jobs. According to the participant, disaggregation of statistics for professional and managerial job categories reveals that a high degree of occupational segregation persists. Mr. Boulet noted that the ILO study refers only to occupations where males are in the majority and not to those almost exclusively dominated by men. Nor, he said, does it indicate whether women in so-called "male" professions have reached senior positions, nor indeed whether they are moving ahead with any rapidity. Future surveys of women's progress in these areas will provide an important indication of any obstacles to their advancement, he said.

On the same subject, another participant observed that Mr. Boulet's work implies occupational diversification will become the norm as long as more women graduate from university with "male" degrees. But that situation will not apply to the many women without university training, she said, who will need different advice on coping with the labour market.

The link between part-time work and the earnings gap between male and female workers was also discussed. Mr. Boulet was asked whether the fact that more newly employed women are taking part-time jobs, particularly in the service sector, will have any particular impact on that differential. He replied that conclusions about part-time work are difficult to reach, since Statistics Canada data show 75 per cent of part-time female workers prefer this arrangement. That response brought a further comment from another participant, who argued that women opt for this kind of work because of their "double burden" of job and family responsibilities. With a shorter work week, many of this group would choose to work full-time, she said.

One participant stressed the importance of Mr. Boulet's observation that diversification into traditionally male occupations should not deter women from entering well-paid female occupations such as nursing. Ms. Kunin noted that affirmative action programs have been particularly effective in the nursing profession. Mr. Boulet added that nurses would be even better off with the introduction of a Ph.D. program in their field.

In conclusion, another participant described recent events in the pharmacy profession in Nova Scotia. Large numbers of women have entered the Pharmacy School at Dalhousie University, she said, with the result that very shortly the profession should become completely feminized. Consequently, the Pharmacy Association is now working with the university to set a quota system for male applicants and to lower standards to grant them access to the program. "If they'd do a balancing thing for women in engineering," quipped Ms. Kunin, "then we'd be willing to negotiate."

5 Women and Education: Branching Out

Presentation by Jane Gaskell

Educational institutions start all students out on more or less the same curriculum at the age of five, but before they reach the labour market, these students are streamed into a myriad of specialized programs. This streaming separates girls from boys and sets them on different paths into the labour market. It is not that girls end up staying in school for a much shorter time than boys or achieving at a lower level while they are there. It is rather that the programs they are in systematically lead to lower-paying jobs in sexually segregated occupations, even when they are at the same formal level of schooling as the programs boys are in.

The differentiation that exists within the educational system reflects, and indeed is largely created in response to, differentiation in the labour market. There is a chicken-and-egg quality to the discussion of which comes first or where changes might be introduced. People enrol in different educational programs largely because they want to qualify for different kinds of jobs. People in different kinds of educational programs develop orientations towards, and capacities for, different jobs by being there in the first place. The relationship is a dialectical one, and it is just as unhelpful to say nothing can be done about education until the labour market changes as it is to say nothing can be done about the labour market until education changes. It is important to address both at the same time.

There are several possible directions in which to look for change. One would be to accept the gender difference in enrolment but insist that male and female streams be more equally rewarded in the labour market. The provision of equal rewards might in effect desegregate the programs by making the ones women are in more attractive to men. This solution makes more demands on employers than on the educational system. An alternative is to encourage women to go into male programs in order to get the greater rewards that are available there. This is a more conventional solution and one that in the short run seems more feasible. The problem is that enrolling in a male program does not result in equality for women on graduation. The danger is that this strategy could complete the devaluation of traditional women's areas, through defining what males now have as what females should strive for. This danger must be borne in mind, even though in this chapter I will look at ways of integrating women into traditionally male areas.

This chapter will focus on gender segmentation throughout the educational system, ask what we know about it, and what might be done to minimize it. Because there are so many levels and kinds of institutions where education and training take place, and there are so many kinds of specialized and gender-differentiated programs, the overview must be a very general one. Although many similar issues are involved in the high school, in postsecondary education, and in job training, analysis and recommendations that are designed to be applicable to many different educational settings will not do justice to them all.

The Extent of the Problem

It is difficult to get accurate data on the extent of segmentation by gender within educational institutions. This is true for the researcher interested in the larger federal and provincial picture, as well as for the local activist interested in pinpointing the problems at a particular institution. In the census and in most studies of the relationship between education and the labour market, the number of years of schooling obtained is noted but not the kind of education. Summaries of educational statistics consistently report on the level of education but not on the type of education.[1]

Many of the data problems faced by researchers trying to accurately estimate the extent of sexual segregation in education are similar to the problems faced by researchers trying to estimate it in the labour force. The problems are exacerbated in education by a relative lack of interest in the subject in the research community and the different levels and types of governmental jurisdiction involved.[2]

The most fundamental problem is that in many cases, especially at the level of the high school and the community college, program data are simply not collected by gender. Even when the data are collected, they are often not analysed or reported publicly. Statistics Canada reports field of study by gender for university student enrolments and graduations. But its data on community colleges, on vocational training, and on continuing education are a mess, and data on high school programs are nonexistent. In May 1984 Statistics Canada announced that several new surveys would be undertaken to expand the data available on postsecondary education. This will include much useful new information on program enrolment by gender. The data on programs that are not at the postsecondary level remain quite inadequate.

When data are available, there are problems in reporting them usefully. Definitions of programs are difficult to decide on. For example, if the term "business programs" is used to describe a division at the community college or in the high school, it will include computer education in some institutions, while in others, computer education will be incorporated with mathematics or applied science or have a division of its own. Moreover, the more precisely programs are defined, the more sexual segregation appears. The category of "business education" obscures divisions between the secretarial, accounting, and management programs. The category "liberal arts" obscures differences between English and economics. Comparability across institutions is difficult to establish; the status of part-time students is often unclear; and program labels and content change over time, making realistic comparisons difficult.

Despite these difficulties, some indication of the extent of gender segregation can be obtained from the existing data. Table 5-1 shows university enrolment in bachelor and professional degree programs. Women predominate in nursing, education, household science, and social work. They are under-represented dramatically in engineering and account for less than 40 per cent in dentistry, forestry, religion, law, commerce, and medicine.

Table 5-1

University Enrolment of Women, by Field of Study, Canada, 1970/71 to 1980/81

	Enrolment						Change in female enrolment, 1970-81	1980/81 enrolment as a proportion of 1970/71 enrolment	
	1970/71		1975/76		1980/81				
	Total	Female	Total	Female	Total	Female		Total	Female
		(Per cent)		(Per cent)		(Per cent)	(Percentage points)	(Per cent)	
Field of study:									
Arts	103,108	44.5	102,626	49.0	94,706	54.0	9.5	91.9	111.7
Commerce and business administration	16,747	10.2	29,752	22.0	44,527	37.2	27.0	265.8	966.0
Education	38,531	56.4	45,118	61.9	36,382	68.6	12.2	94.4	114.9
Applied arts	5,446	56.8	11,521	60.3	12,189	61.6	4.8	223.8	242.9
Law	7,250	12.7	8,885	26.7	9,743	38.2	25.5	134.3	403.9
Religion and theology	2,670	23.7	2,252	34.0	2,926	29.8	6.1	109.5	137.5
Subtotal, social sciences	173,752	42.6	200,154	47.4	200,473	52.3	9.7	115.3	141.7
Sciences	51,507	28.0	57,988	36.5	58,153	40.3	12.3	112.9	162.5
Agriculture	3,721	10.5	4,613	25.9	4,736	35.5	25.0	127.2	431.6
Environmental studies	-	-	1,068	28.6	1,994	35.1	-	213.0*	297.4*
Engineering and applied sciences	25,706	0.2	30,802	5.5	38,247	9.7	9.5	148.0	778.9
Dentistry	1,651	5.6	1,916	13.0	1,994	20.7	15.1	120.7	448.9
Medicine	5,733	18.1	8,843	27.2	9,780	36.0	17.9	170.5	339.2
Health occupations	2,500	76.2	2,873	81.8	3,080	82.5	6.3	123.2	133.4
Nursing	4,391	97.9	6,421	97.3	5,846	97.1	-0.8	133.1	132.0
Pharmacology	2,068	49.0	2,686	60.5	2,755	63.7	14.7	133.2	173.0
Household sciences	2,941	99.3	4,321	97.8	3,365	97.1	-2.2	114.4	111.8
Veterinary medicine	707	12.2	999	29.5	1,007	46.9	34.7	142.4	548.8
Subtotal, sciences	100,925	26.4	122,530	34.1	130,957	36.0	9.6	129.7	177.0
Nonclassified	1,620	46.0	7,853	43.6	8,296	49.0	3.0	512.0	545.6
Total	276,297	36.7	330,537	42.4	339,726	46.0	9.3	122.9	154.0

*1975-80 figures.

SOURCE Based on data from M. von Zur-Muehlen, "Past and Present Graduation Trends at Canadian Universities," Statistics Canada, 1982, pp. 82-85.

There have been some rapid changes recently in female enrolment in universities. Women have increased their overall participation rates from 24 per cent in 1960 to 46 per cent in 1982.[3] This increase has been uneven across fields of study, although where the largest increases have taken place depends on how one calculates it. Looking at fields where women were underrepresented, the increase in the percentages of women enrolled in engineering and in sciences overall has been about the same as the increase in the percentage of women enrolled in the university as a whole. The percentage increase in women enrolled in commerce, law, medicine, veterinary medicine, and dentistry has been considerably greater than that. Because female enrolment started low in engineering and because commerce programs have expanded greatly, the percentage increases in female enrolment have been greatest in these programs.

Some figures for community colleges are given in Table 5-2. Women now outnumber men at the community colleges. Women predominate in secretarial programs, in nursing, and in community services. They are underrepresented in scientific and technological fields. Community colleges were largely established in the 1960s, and they have expanded and changed rapidly since then. Ways of reporting the data have changed along with them, so comparisons of gender enrolment over time are difficult to make. The figures do suggest significant increases in female enrolment in general engineering and architecture, but not in electronics and mechanical engineering. No conclusions should be drawn without more information on changes in the programs, however.

There are no equivalent figures available for high schools across the country. Some provinces do not even collect course enrolment data by sex. Ontario

Table 5-2

Full-Time Enrolment of Women in Community Colleges, by Field of Study, Canada, 1970/71 to 1981/82

	Enrolment					
	1970/71		1974/75		1981/82	
	Total	Female	Total	Female	Total	Female
		(Per cent)		(Per cent)		(Per cent)
Field of study:						
Arts	9,590	52.7	15,673	52.4	19,778	59.4
Business and commerce						
Secretarial	-	-	7,636	98.1	12,332	99.5
Management and administration	-	-	-	-	26,273	49.8
Data processing	-	-	-	-	11,180	46.4
Financial management	-	-	-	-	7,231	56.2
Other			28,240	36.3	8,232	54.8
Total	27,004	30.5	35,876	n/a	65,248	59.9
Community services	57	56.1	14,295	66.6	22,855	72.5
Education	10,848	73.0	-	-	337	74.1
Architecture	1,187	4.7	-	-	643	16.0
Mechanical engineering	94	-	2,546	1.0	6,295	2.1
General engineering	3,206	1.3	-	-	7,176	11.6
Technologies	-	-	-	-	2,780	41.4
Electronics	7,852	0.01	9,087	1.2	14,306	2.3
Other	-	-	8,452	6.1	2,687	10.5
Medical sciences						
Nursing	26,545	98.3	18,607	95.4	20,568	93.3
Treatment technology	-	-	-	-	6,322	75.6
Other	3,608	85.6	9,805	78.7	1,884	67.4
Total		n/a		n/a		87.7

SOURCE For 1970/71, Statistics Canada, *Education in Canada, 1961-71*, Cat. 81-229, 1973, Table 39, p. 155; for 1974/75, Statistics Canada, *Community Colleges, 1975-76*, Cat. 81-222, 1976, Table 3, p. 12; for 1981/82, Statistics Canada, *Educational Statistics, 1981-82*, Cat. 81-002, 1983.

began systematic collection and reporting of its high school enrolment data in 1982. A survey in 1980 was the beginning of this program, and figures from that survey are reported in Table 5-3. There is a striking amount of sexual segregation at all grade levels. The greatest segregation is in nonacademic areas like family studies, industrial education, and business education. It is clear, however, that girls drop out of science and math, while boys drop out of history and languages.

Table 5-3

Selected Enrolment Figures from Ontario Survey of "Typical" Publicly Supported Secondary Schools, 1980[1]

	Grade	Mean female representation rate among schools
		(Per cent)
Course subject:		
Humanities		
English	12	58
	13	53
Honours English	13	60
Canadian history	12	55
	13	53
French	9	64
(H22050)	10	64
	11	58
	12	74
	13	72
German	10	62
	11	67
	12	72
	13	62
U.S. history	13	52
Man in society	10	66
	11	66
	12	58
Mathematics		
Computer science	10	32
	11	35
	12	35
	13	26
Math	9	47
(141050)	10	50
	11	46
	12	40
Algebra	12	43
	13	34
Calculus	12	43
	13	41
Science		
Senior biology	10	57
	11	60
	12	41
Honours biology	12	62
	13	56
Senior chemistry	11	39
	12	37
Honours chemistry	11	46
	12	44
	13	42
General science	9	50
	10	47
	11	44
	12	37
Senior physics	10	29
	11	37
	12	30
	13	22
Honours physics	12	33
	13	30
Home economics		
Family studies	9	97
	10	96
	11	93
(H63100)	12	79
	13	66
Business		
Accounting (180071)	10	60
	11	60
(580071)	11	64
	12	63
(H80074)	11	56
	12	52
Data processing	10	51
	11	50
	12	44
Business math	10	73
Commerce and business procedure	11	97
	12	98
Technologies		
Drafting	9	8
	10	10
Applied electronics	9	3
	10	3
Woodworking	9	7
	10	10
Construction	11	8
	12	9
Machine shop practice	9	2
	10	2
Welding	11	1
	12	1
Auto mechanics	9	3
	10	6
	11	5
	12	6

[1] These figures exclude high schools with special emphasis on business and/or technological studies. Numbers in parentheses refer to Ontario course guideline numbers.

SOURCE Ministry of Education, *Report on the Survey of Secondary School Course Enrolment by Sex*, Ontario Management Information Systems Branch, Appendixes, 1982.

There have been several studies recently calling attention to the underrepresentation of girls in high school mathematics and physical science courses.[4] These courses are particularly important in separating students who will be eligible to continue on to post-secondary fields in technical and scientific areas, the areas where women are most underrepresented and where relatively high-starting salaries are possible. There seems to be substantial variation across the country,[5] but there is a clear trend for girls to drop mathematics earlier than boys and to take biology rather than physics in the senior high school grades.[6]

Table 5-4 shows the breakdown by gender of enrolment in the Canada Manpower Training Program. Women predominate heavily in nursing, clerical, and personal service areas. They are virtually nonexistent in machining, construction trades, transportation, and mining. Over five years, the percentage of women enrolled in manpower training has increased, especially in managerial administrative areas and in the traditionally female areas of clerical work and personal service. Small increases took place elsewhere, while the number of women actually decreased in machining. Vocational training that is not part of the Canada Manpower Training Program is not reported by Statistics Canada, although a new effort is being made in this area.

To summarize, substantial gender differences in educational enrolment patterns continue to exist. These differences start in the high school and are similar in pattern to segregation in the labour market. Women have increased their representation rapidly in traditionally male areas at the university level in the last ten years. Indications are that changes at the community college, vocational, and high school levels have not been nearly as great. Scientific and technical areas still have the lowest participation of women. To date there has been virtually no analysis of the variance across institutions and programs to see where sexual segregation is least, to compare the amount of segregation at school with the amount in the labour market, or to analyse what factors promote sexual integration.

A first step in combating gender segregation in enrolment patterns must be collecting more systematic data on where it exists and how it varies. These data are politically important for making the problem clear to a wider audience. They can focus the concern and energy that exist and mobilize new resources. The data are also analytically important for furthering our understanding of what produces more and less gender segregation in education. This is critical in generating policies that will be effective in increasing the representation of women in nontraditional areas.

Table 5-4

Breakdown of Canada Manpower Training Program Female Trainees, by Occupation, Canada, 1976/77 and 1980/81

	Enrolment					
	1976/77		1980/81		Change in female enrolment, 1976-81	
	Total	Female	Total	Female		
		(Per cent)		(Per cent)	(Percentage points)	(Per cent)
Field of occupation:						
Management and administration	1,228	29.6	976	52.5	22.9	140.6
Natural science, engineering, and mathematics	1,099	14.0	2,275	18.6	4.6	318.0
Nursing and related occupations	1,358	74.4	2,756	87.8	13.4	272.0
Clerical	6,041	68.7	14,320	93.1	24.4	322.0
Personal services	3,935	58.0	3,589	88.4	30.4	157.0
Machining	4,707	5.9	14,527	2.6	-3.3	137.0
Construction trades	5,405	1.2	31,612	1.3	0.1	642.0
Transportation and equipment operation	891	4.3	4,147	5.7	1.4	621.0
Mining, oil, and gas	759	0.7	494	2.8	2.1	-2.8
Basic skill training	15,002	23.8	10,428	54.6	30.8	159.0
Total	60,788	27.3	119,280	30.8	3.5	180.0

SOURCE Data for 1976/77 from Labour Canada, *Women in the Labour Force, 1977 Edition, Part 3*, Women's Bureau (Ottawa: Supply and Services Canada, 1980); data for 1980/81 from Canada Employment and Immigration Commission, 1981.

The leadership in this must be taken by Statistics Canada, which has the responsibility and facilities for collecting and analysing Canada-wide data. However, provincial governments and individual universities, community colleges, and school boards have an important role to play in collecting and making available data on gender segregation within their own jurisdiction. Local reports can be particularly important in generating local interest in, and commitment to, changing enrolment patterns. They also serve as benchmarks for monitoring the effects of local policy initiatives. They can be oriented towards uncovering relationships that are of particular concern in particular places. For example, a school board can look at the effect of a new guidance policy or a new compulsory math course. A province can look at the effects of affirmative action guidelines or efforts to increase cooperation with employers. These factors are likely to get lost in a Canada-wide analysis.

Explanations of Gender Segregation in Education

Explanations of gender segregation are many, but they can be roughly grouped into explanations that stress the characteristics of individuals and those which stress the characteristics of programs. Each of these has different implications for policy, and I will deal with them separately. This brief summary cannot provide a detailed review of the evidence in each area, but it can point to the variety of factors involved.

Individual Characteristics

There has been a tradition of understanding educational enrolment as an outcome of individual choice and aptitude. In the case of gender, this leads to research on what differences between males and females are responsible for their different proclivity to enrol in educational programs or what the differences are between women who enrol in predominantly female programs and those who enrol in predominantly male programs. The research leads to policy recommendations designed to change the characteristics of women so that they will be more like men, or at least more like those unusual women who do choose nontraditional programs. If it is pushed too far, making women over on a male model in order to compete with them seems both unnecessary and politically suspect. Although it would be logically quite consistent to also recommend that men become more like women so that they would choose traditionally female programs, this would not happen, quite understandably, given the financial consequences of being more like a woman and the general devaluation of women's work and characteristics.

Differences in Aptitude and Achievement

Overall gender differences in aptitude and achievement in school are small, much smaller than enrolment differences, and they favour women, at least through the end of high school. Girls get better overall grades, are less likely to be in remedial classes, and are more likely to complete high school.[7] If achievement determined course enrolment, women would do much better than they do. The problem is determining why women are not able to translate their school achievement into the more prestigious educational programs that lead to higher-paying jobs.

Arguments about sex differences in aptitude, however, have been, and still are, heated. Ignoring the implications of female superiority in verbal and social areas, they have focused instead on female inferiority in mathematical and spatial abilities as an explanation for women's lack of representation in scientific and technical fields. Recently, special attention has been paid to whether sex differences in ability explain differences in mathematics and physics enrolments or whether differences in course enrolments explain differences in ability.[8] Disagreement remains, but the important point for our purposes is that there is a large overlap between the distribution of mathematical and scientific ability among males and females, whatever the mean difference. The overlap in achievement and ability is much larger than the overlap in course enrolment and in labour market participation.[9] Even if there are ability differences on average, we need to ask why those women who can do math better than most men do not pursue scientific and technical education.

The research on mathematical and spatial abilities suggests programs designed to increase girls' ability to do math and science. There are several such efforts, the most notable of which are probably the EQUALS project at the University of California in Berkeley[10] and a demonstration project in England.[11] These programs work with teachers and students and stress the importance of direct teaching of mathematical and spatial concepts especially in areas in which girls might be deficient.

Differences in Personality Characteristics

The link between personality traits and field of study is much less well established than the link between achievement and area of study. There is a great deal of variability in every field. Careful reviews of the phychological literature on sex differences in personality find few robust and consistent differences.[12]

However, it has been suggested that gender differences in things like confidence, anxiety, aggression, fear of success, independence, and interdependence may affect girls' entrance into nontraditional programs. Research on pioneer women in nontraditional areas does suggest they stand out by describing themselves as "dominant" and "competitive."[13] Assertiveness training has been used to build confidence and teach women the interpersonal skills they need, particularly in male environments. The notion that women experience math anxiety has particular currency, and programs exist to alleviate it.[14] Other research shows that even if women experience the same level of success in nontraditional tasks as men do, they anticipate that they will do less well in the future.[15] Other much quoted research has noted women's fear of success.[16] This also suggests potentially useful interventions to build women's confidence in their abilities.

The research on personality traits works on a deficit model of women and does not address the question of why women's strengths in, for example, interpersonal sensitivity and flexibility are not reflected in their representation in high-status programs like law and business. The links that are asserted between personality characteristics and course choice often seem to restate existing differences rather than to establish necessary links. Do you need to be "aggressive" to be a doctor or will "interdependence" do? Moreover, assuming that what it takes to be a pioneer woman is what it takes to actually do the job is clearly misleading. Despite all these caveats, carefully targeted programs to give women personal skills they can use to try new fields seem worthwhile.

Family Support

The fact that parents are hesitant about girls and young women entering nontraditional areas of training can have an impact on enrolment. Adolescents and young adults are still living with, and in many ways are controlled by, their parents. In the high school, parents are required to approve course choices. Parents are also important in paying for and encouraging postsecondary participation. Youth are strongly influenced by their parents' social beliefs and patterns of activity.

Many reports have focused on trying to change parents' notions of what is acceptable for their daughters. Most recently, the Science Council of Canada has recommended that "the Minister of State for Science and Technology and the Minister responsible for the Status of Women should together sponsor a large-scale public information program directed especially towards parents and designed to raise public awareness of the need for girls and young women to participate in science and technology education."[17]

The extent of parents' influence and, more importantly, how restraining and traditional this influence actually is, cannot be gleaned from the existing research and will undoubtedly vary over time and from community to community. Public opinion polls show a liberalizing trend and widespread support for the notion of equal opportunity and the idea that girls should be encouraged to take more responsible positions at work.[18] It is not clear that public information programs can deal with the hesitations that parents have about their daughters embarking on nontraditional careers. These hesitations are based on experiences, knowledge, and values that are produced in complex ways.

Young People's Attitudes towards Gender

The attitudes of young people towards the traditional gender division of labour will affect their choice of educational programs. More liberal sex-role ideology is characteristic of those women choosing more education and less traditional programs.[19] The difficulty with interpreting this research lies in the way statements about gender and aspirations for work both cause and are caused by the kind of education and work experiences students have. The research tends to reify what is a complex and dynamic motivational entity.[20] Rather than being anchored in early childhood and unchanging, attitudes respond quickly to changed social practices.

How traditional are existing beliefs among young people about gender? A recent survey of U.S. adolescents showed that both male and female students overwhelmingly endorse the idea of equal opportunity, but when it comes to their own futures, they prefer to maintain traditional role distinctions, the males more strongly than the females.[21] A majority of males agreed that "it is usually better for everyone involved if the man is the achiever outside the home, and the woman takes care of the home and the family." Only one-third of the girls agreed. A large majority of both males and females endorse the importance of parenthood, accept marriage as the best way of life, and reject as "not at all acceptable" the idea of both husband and wife working full-time when preschool children are part of the family. Any role reversal with men working less than women and doing more child care and housework is overwhelmingly rejected.

Over the last ten years there have been few changes in occupational preferences despite rapid change in attitudes towards gender equality. High school girls continue to choose jobs in an occupationally segregated labour market, in clerical work, nursing, teaching, sales, and service occupations.[22] More girls are choosing high-status white-collar jobs, and fewer are choosing to be full-time homemakers, but few prefer blue-collar or technical jobs. Women continue to apply different priorities when thinking about a job. They value sociability, self-actualization, and helping others more than men; and income, status, and potential for advancement less than men.

Despite an overall correlation, attitudes about gender do not translate in any straightforward way into educational or occupational preferences, and traditional preferences by no means arise from wholesale endorsement of a traditional domestic ideology. Young people take into account not just what they would ideally like, but what they see as possible and feasible. In a recent Vancouver study, adolescent girls felt that in order to have a family at all they would have to do the domestic work and plan their work lives around this.[23] Men would not do the domestic work, alternative forms of child care were not available or good for their children, and as women they would earn less money than men and be less likely to be hired in nontraditional areas. It was these perceptions of constraining social structures, rather than internalized preferences, that explained their continuing adherence to traditional paths.

To convince young people that nontraditional occupational paths are desirable and possible requires a policy that challenges their understanding of how the world works. Only if the world actually is more egalitarian than they suspect is this possible. Contact with the world of work can help, if the experience is structured in such a way that it does not simply reconfirm traditional stereotypes. Cooperative programs where work experience in nontraditional areas is provided, contact with women who have organized their family and work lives in a variety of ways, and critical discussion of the issues of gender and work can open up alternatives that young people may not have considered. Information on labour market trends, training opportunities, and changing family structures can be important in challenging their common-sense understanding of how work is organized. At the same time, it is important that the experiences and knowledge that youth have of their immediate environment not be dismissed lightly in an attempt to substitute a new view. It is quite likely that young people will dismiss the official version of reality if their day-to-day experience contradicts it.

Program Characteristics

An alternative approach to research and to policy is to examine the characteristics of programs that are more and less sexually integrated. Relatively little research of this kind has been done. This comparison of program characteristics rather than individual characteristics leads to recommendations about how to change the organization of educational provision rather than the consumer of educational services. It is directed to the public arena, to decisions about funding, administration, and teaching rather than to private decisions by women or families.

While this approach is preferable in my view, individual characteristics and program characteristics cannot be completely separated. Individual preferences take into account what programs exist and what the likely outcome of taking them will be. Individual characteristics are shaped by experiences in public institutions, particularly by experiences in schools. Schools are charged with forming the public consciousness as well as reflecting it. They do this in early experiences in the primary grades, and later in providing to students images of what their abilities are and what work is like. Any approach to analysis and change must consider the creation of individual preferences as well as the creation of a specific opportunity structure.

The Extent and Structure of Specialization in Education

One way to lessen gender differentiation in educational enrolment patterns is to lessen the amount of differentiation and to increase common core programs. There are numerous historical examples of how program specialization has separated women from men. These include the separation of social work from sociology, the separation of public health and sanitary science from the physical sciences, and the separation of pedagogy from philosophy and psychology.[24] One would not argue for a complete reversion to interdisciplinary and nonspecialized programs, but re-examining the degree of specialization could increase gender integration.

One way to do this is to combine what are now distinct courses. In the high school, for example, instead of offering separate home economics and industrial education courses, which in practice separate male and female students in grade 9, some schools have instituted an introductory course in practical home skills that incorporates elements of both courses, enrols both male and female students, and introduces them all to areas they might not otherwise encounter. The introduction of computer courses raises the same issues. Data processing is usually offered as a separate course from computer science. More girls take the former; more boys take the latter.[25] A combined computer studies course or a module of a required math course dealing with computers enrols a more equal representation of male and female students. At the level of the community college, business training programs tend to separate accounting, secretarial, and managerial streams, and the representation of women is quite uneven in each. A combined program avoids this. Any institution could review its offerings to find ways of combining specialized courses in order to provide students with more general skills and create a more equal representation of men and women.

Another way to achieve the same goal is to increase common core compulsory courses. In the high school, mathematics is not compulsory after grade 10; so girls drop it. Boys are prevented from dropping English and social studies because these are required through grades 11 and 12. Increasing the requirement for math (as long as it does not become business math and industrial math, just recreating the sex difference under another guise) would decrease sexual segregation. This needs to be balanced against differences in the interests, needs, and vocational goals of students, but such a policy would prevent girls from ending up without the prerequisites for further study in nontraditional fields.

There is other research that suggests women will be more likely to enter training that is general and leads to a broad range of jobs. The occupations in which women are concentrated (clerical, semi-professional, and service work) tend to require pre-entry job training that provides general skills transferable to different firms, industries, and geographical areas. Male jobs are more likely to involve training that is specific to more narrowly defined areas of work and takes place on the job.[26] This difference arises both because women have preferred to enter fields that qualify them for a range of jobs, allowing them to enter and leave the labour force and move where family demands require it, and because employers have been reluctant to hire and train women for more specialized work.

High school girls are reluctant to go into industrial education in the high school because it does not provide generalized job skills, while business education does.[27] The programs into which women have moved most quickly at the university (law, medicine, commerce) do have the character of providing a general credential and set of skills that are useful in a wide variety of places.

This suggests that educational institutions should consider ways programs could be reorganized so that narrow and job-specific training becomes broader training that qualifies students for a range of entry level positions. Reorganizing pre-apprenticeship programs and blue-collar training along the lines of "generic skills"[28] is a step in this direction. The rapidity with which specific jobs are changing and disappearing, and the importance of recurrent on-the-job training, provide more reasons for this move.

Recruitment and Selection Criteria

Criteria for entry into a program define the pool of eligible students and the way selection will be made among those who apply. Eligibility criteria may still include gender in a few cases. The practice of streaming all girls into home economics and all boys into industrial education has only recently been eliminated in public schools and still exists *de facto* in many schools through the organization of the timetable. However, even when gender is not explicitly used to screen candidates, other criteria may systematically exclude more women than men, when this is not a deliberate policy.

The use of purely achievement criteria would normally favour women who tend to get higher-grade point averages than men. The use of criteria such as prerequisite courses, job experiences, seniority, assessments of personal qualities, and simulations of work-related behaviour needs to be based on a clear demonstration of their relationship to success in the program. Height and strength requirements have been contentious. Prerequisite courses in math and science areas that women tend not to have might be examined for their necessity, especially for mature students. Job experience requirements may be difficult for women to meet. Women's personal characteristics may be devalued by male evaluators accustomed to male students. The use of such criteria would have to be looked at in the context of individual programs, but they are worth taking up. Adding criteria that recognize women's strengths should also be considered. The example of McMaster University's medical program, which puts less emphasis on science prerequisites and more on community service experiences, shows enrolment patterns can be affected by admission criteria. Sixty-seven per cent of McMaster University's first-year medical students were women, compared with a 40 per cent average across Canada last year.

Whatever the criteria, institutions can make efforts to find qualified women by recruiting actively. In the United States, the necessity to find women to meet affirmative action targets has led to such recruiting. Descriptions of programs must make clear that women are welcome by portraying them, using language that includes them, and including descriptions of services that are available to them.

Classroom Climate and Curriculum Issues

The way instructional staff put their courses together and teach them can affect how comfortable women are and how well they succeed. Faculty members can overtly or inadvertently create "a chilly climate for women" through subtle differences in the ways they interact with male and female students. There is some evidence that female students are more affected by the "personal supportiveness" of educational environments than men are.[29] Examples of how sexism arises in classroom processes are available in the research literature. Some research on science classrooms shows how male students "hog" equipment and the teacher's attention, unless a firm and structured pattern is put in place by the teacher.[30] A tendency to devalue women's work, to use a language that excludes women's experience, and to exclude women from informal support and communication networks have been noted. A checklist of the problems and a series of recommendations to deal with these issues have been developed by the Association of American Colleges' Project on the Status and Education of Women.[31]

The sheer number of women enrolled in a program is a major factor in encouraging or discouraging more women. The existence of a critical mass of women changes the interpersonal dynamics of the classroom, as it does the workplace.[32] Achieving this should be a primary objective of policy. The existence of female staff is also important as a statement that women have a place in the field.

The content of courses tends to change slowly and to be taken for granted. The content of grade 11 science, apprenticeship training, and medical education reflects any number of political compromises, venerable traditions, and uses for the student. Entering women's concerns and experience into this process of arriving at the curriculum can mean changes in what is taught and in its attractiveness to women. Efforts, for example, to include in the high school science curriculum more of a social context or to downplay programming as an introduction to computing can increase the number of girls who are interested and enrolled. Content can be added that will help women. For example, teaching tool use rather than assuming students know it encourages girls who may feel hesitant. Including examples from girls' experience to illustrate physical scientific principles increases girls' success.[33]

The Organization of Support Services

The importance of the provision of better counselling, a network of communication among women, daycare services, increased information about financial aid, and job placement services for women have frequently been noted. Women's responsibilities for child care and family support are substantially greater than men's and must be taken into account in organizing programs that will attract women. Their financial resources are likely to be less, and their informal contacts may be more difficult to establish in a traditionally male area. The existence of sexual harassment arises in education as it arises on the job. Insufficient and incorrect knowledge of educational opportunities and of the workplace can prevent women from trying nontraditional programs. Counsellors can address this, if they have the appropriate knowledge, materials, and concern. There is a demand for materials that explain what is happening to traditional women's jobs and where women might direct their training beyond these to new and expanding areas of the economy.[34] In-service workshops for counsellors who are not aware of, or interested in, issues of sexual equity can be mandated by the institutions where they are employed or by the agencies that fund them.

Links with the Labour Market

The final, but perhaps most critical, issue is the relationship between training programs and the workplace. The major reason for entering specialized educational programs is to get a job. Many women continue to enter clerical and secretarial training because it seems like the best way to get some kind of job.[35] Their transition from school to work is relatively easier than men's if they stay in these areas.[36] One of the major barriers to women entering nontraditional programs has been that neither they nor their teachers and advisers are convinced that they will be employed at the end of it. Studies of why commerce programs have increased their enrolment of women point clearly to a changed hiring climate brought about by affirmative action initiatives in the United States.[37]

Creating this climate depends on employers who are anxious to hire women and who communicate this to those who do the relevant training. There are various ways to communicate the fact that traditional versions of a male workplace are no longer accurate if the workplace actually has changed. Students can have direct contact with employers through cooperative work study programs, summer jobs, and work experience modules. Good placement services for women can encourage them to enter nontraditional programs as well as keep those who do enrol in the same area when they enter the labour force. Follow-up studies of graduates, and invitations to successful women graduates to return and talk to students, can also change the climate. At a time of high unemployment across the board, it will be difficult to demonstrate the hiring of women, but it is probably the major factor in attracting women into most educational programs.

To summarize, most changes are located clearly neither in the institution nor in the individual, but in the interaction between the two. The expectations, aspirations, and perspectives of students and educators are shaped by educational provision and the social context in which they operate and are filtered through assumptions about the role of women and the organization of work. If we look at programs where rapid change in the gender composition of educational programs has taken place, we can see the intersection of these processes. A historical example is the shift from business courses in the high school in the 1880s that were filled predominantly with men to business courses in the high school in the 1920s that were filled predominantly with women. In the meantime, there had been profound shifts in the gender composition of the labour force, in the content of the courses, in the processes of selection and differentiation within the school, and in ideas about what was appropriate behaviour for women. A more recent example is change in the gender composition of university commerce departments. Corporate employers started to hire women graduates; school administrators started to recruit and make provision for women students; and women students started to see business management as a rewarding career for a woman. As a change began, each group rapidly re-evaluated the expected costs and rewards of an M.B.A. for a woman and took action that further encouraged it.

On Educational Policy

There is a burgeoning literature on the complex process of translating policy initiatives into educational practice.[38] Teachers and faculty members resist intrusions from administrators onto their terrain, and educational institutions are organized so that they are often able to translate their resistance into continuing the status quo. At the same time, changes that are desired by teachers cannot be translated into practice without the cooperation of those who are administrators. The result is a profound conservatism in education, where what is happening in the classroom changes a good deal less than the rhetoric that surrounds it.

This needs to be kept in mind in addressing the problem of sexual equity in schooling. The problem is a complex one with many faceted explanations, as I have shown. No single solution can be mandated to solve it. Moreover, no single solution could be mandated because of the different jurisdictions involved and the autonomy educators need and protect.

The complexities of prescription and implementation demand a decentralized multi-faceted policy that encourages different groups to try different approaches, while preserving a more centralized body to help them evaluate their success and communicate about it to others. This approach has the advantage of generating more information about what factors have an impact on enrolment, with attention to the context in which they apply. It has the further advantage of harnessing the energy and ideas of those who would like to bring about change without forcing them into changes they feel do not apply to their situation.

More specifically, the following should be considered in developing policy aimed at producing gender equality in education.

First, the collection of data, its analysis, and dissemination need to be dramatically improved in order to target priority areas for attention and analyse what kinds of interventions are effective. This can begin at the level of each university, community college, and school board. Some already have an individual or a committee charged with the responsibility of getting and reporting data on where women are enrolled. To take just one example at each level, the University of Alberta has a committee called WISEST, chaired by the vice-president, which has collected and analysed data on women and made changes on the basis of it. Women's access coordinators at community colleges in British Columbia have performed a very wide range of functions in relation to women students, including time-consuming searches for enrolment data and the application of pressure to have data collected and reported. The Toronto School Board has recently released its own report on girls' enrolment in science and math. More educational institutions should set up a permanent committee or position responsible for data collection and analysis in relation to gender.

Coordination and leadership, however, are necessary at the provincial and federal levels. Many of the enrolment forms used by institutions for their own purposes are drawn up by provincial governments. Funding comes through the provincial government and the federal government. Coordination among levels of education and with departments of labour can only be done centrally. At the moment there is little effort in this direction.

Second, governments must provide the resources to facilitate diverse initiatives to encourage women to go into a wider variety of programs. As outlined above, there are many good ideas about what will contribute to equalizing women's representation in educational programs. I will not summarize all the potential interventions here, although some points deserve highlighting.

It is better to change programs to make them more attractive to women than to change women to make them fit the old programs. The assumption that something is wrong with women and that they need to be made over in a male image to share in the country's wealth is wrong and will be politically unpopular. There are many things that can be done to change programs instead. A serious review of which ones apply should be undertaken everywhere.

One area that needs targeting is the high school, both because a pronounced pattern of differential enrolment appears there first and because the high school has been widely ignored in research and policy initiatives. Programs in math and science and in technological areas also deserve to be targeted. Enrolment is changing slowly in these areas, which are increasingly important in a technological society.

Program changes carried out in cooperation with employers are the most likely to succeed. The transition to work in a nontraditional area is not an easy one. Cooperative programs and work experience components ease it. Employers who are anxious to increase the number of women in their labour force will attract women into training, and they will have the benefit of being able to hire quality female graduates. Reorganization of training programs must have the support of employers if it is to succeed.

It is possible to proceed with a carrot, a stick, or a combination. The carrot would involve offering additional funding to those institutions that wanted to develop new initiatives in relation to sexual equity or that met targets for increasing the representation of women in nontraditional programs. Starting with the carrot is likely to invite least resistance. If no changes occur, stronger measures are possible, including tying funding to some improvement in the sex ratios in the educational programs that are being funded.

No one approach to change is sufficient. Some strategies will be more important for some kinds of programs, in some commodities, for some kinds of women. Rather than set out on a single solution, it is appropriate to have those closest to the classrooms concerned make decisions about which approach to emphasize. They have more information about the resources available, the constraints they face, and the needs of the women they teach than anyone else. Federal, provincial, and local governments must provide the resources for demonstration projections, but they cannot dictate the details of implementation.

This decentralization must be coupled with an introduction to the range of approaches that might be taken, evaluation of how interventions are implemented and what their effects are, and publicity for those "lighthouse" projects that seem to be succeeding. Projects should be selected to try different approaches systematically in order to develop more knowledge of each. Canada-wide conferences to share experiences and results would increase energy at the local level, allow the sharing of resources and information, and provide a forum for the critical analysis of what is happening.

Comments by Madeleine Delaney-LeBlanc

The analysis we have just heard of gender differences in enrolment exposes the roots of women's inequality in the labour market. The educational system, combined with family traditions, are the key players in conditioning girls and boys from their youth to develop only part of their capacities: girls, the supportive functions; and boys, the leadership functions.

The labour market continues this conditioning by giving greater salaries, benefits, and status to male workers and lesser rewards to female employees, especially in the so-called "ghettos" of women's work. This conditioning for dependency is the problem most Canadian girls and women must overcome if they are to enjoy equal opportunity and equal benefits in our society.

In the following pages I will discuss specific policies and practices for both provincial and national levels that, if implemented, could help create a climate of encouragement and success for girls in our schools and postsecondary institutions. These methods will also help build an educational system and a labour force that are "*gender-neutral*," in which economic equality for women will be a reality. My comments will focus on equality of results, not only equality of access; data collection and distribution; positive intervention; and affirmative, corrective, and political action.

Some of my suggestions will be directed towards employers in their relationships with the educational system. I quite agree with Ms. Gaskell when she points out that real equality of opportunity for women depends on concurrent changes in both education and the workplace. The ongoing efforts of women's groups for equal pay for work of equal value, and affirmative action programs, are part of the struggle for change in the workplace. These efforts to make the workplace receptive to women in nontraditional jobs and nontraditional roles are essential; but these efforts will not succeed unless the educational system produces women with both the skills and confidence to move beyond traditional patterns.

In addition, I will have one or two policy suggestions to make concerning parents and their involvement with their children at home or through the schools. Any changes made within formal education will meet with greater success and acceptance by the children if their parents are sensitized to the issues as well. In that context, we will look at a recent Quebec program emphasizing parental involvement against sexist education.

Equality of Results in Education

I will now focus on changes to be accomplished in the educational system, specifically in junior high and high schools, community colleges, and universities. I agree with the multipronged approach suggested by Ms. Gaskell, but, in my opinion, girls will enjoy equal opportunities in education *when their educational administrators adopt the principle of equality of results as a guideline and objective*. Equal access at all levels is not enough because girls and boys do not come to the starting gate as equals. Departments of education, school boards, and school directors need to commit themselves to *achieving* enrolments and graduations of girls from courses and programs in numbers representative of their participation at each level in each educational institution. In other words, if girls make up 52 per cent of a particular high-school-level population, then girls should make up about the same proportion of enrolments and graduations in all programs, including math, physics, and computer sciences at that level. If they have an adverse impact ratio of less than 80 per cent, then school administrators can suspect systemic discrimination. If administrators accept this situation, they are in fact encouraging the lifelong economic dependency of girls. If, however, administrators commit themselves to achieving equality of results, they will seek ways to understand the situation and correct it.

Equality of results, much like compulsory affirmative action, puts the onus of change on the system rather than on the individual.

The concept of equality of results is not a new one for educational institutions. Administrators of various institutions are quick to point out that a law or forestry degree program from one university is equivalent to the same degree program offered by other universities in this country. Departments of education constantly evaluate their secondary programs in terms of course content and student results on standardized nationwide testing. Equality of results for males and females is a matter of applying the same principles to male and female participants. Educators must ask themselves and must be asked why girls are not prepared either scholastically or psychologically to seek, in numbers equivalent to their proportion of the general population, careers in dentistry, engineering, forestry, and other male-dominated fields. We cannot hope for a solution until educators are asking themselves and are being asked the right questions. If Canadian women continue to limit their workplace participation to 20 out of 300 occupations, as shown by recent census figures, the educators of this country must be held accountable for their failures.

Administrators at all levels will be especially encouraged to do this if their funding agency, the taxpayers, demands equality of results for the consumers of the educational system, our children.

Data Collection and Distribution

If equality of results is to be our goal and guideline in nonsexist education, then data collection is the first essential step. At a national level, we can lobby Statistics Canada to initiate a comprehensive and continuous data-collecting procedure for enrolments and graduations, according to sex, in all courses and programs in junior high and high schools, community colleges, and universities. The data, once collected and analysed, must be distributed to educational administrators, policy makers, counsellors, home and school associations, and trustees' associations. People will be able to grasp the problem and measure the success of their efforts by reference to the data. Needless to say, school boards and departments of education do not have to wait for Statistics Canada. At the local level, school boards can request, and administrators can implement, head counts in schools and community colleges to establish the levels of female participation in their institutions and to make the appropriate inferences of systemic discrimination.

Positive Intervention Programs

The second step towards equality of results is the use of positive intervention programs within schools. For example, the core of compulsory subjects for both sexes in high schools should include mathematics, physical sciences, and computer sciences for all high school students. Schools could emphasize the career education of their students through activities promoting awareness of job opportunities and labour market realities.

Parents' attitudes could be developed by including them in career information sessions. This process must be adapted to the needs in elementary schools and must begin early, as attitudes and expectations are formed early in life.

At both secondary and postsecondary levels, support groups could be created for girls and their instructors in traditionally "male" subjects. In the present era of declining enrolments, instructors of traditionally male-dominated subjects may well find it in their own self-interest to encourage girls to enrol in their courses.

Positive intervention programs could be extended to include school administrators and counsellors by making them accountable to their school boards, trustees, parents, or departments of education for attaining equality of results in male/female ratios in enrolments and graduations. Departments of education could also emphasize efficiency in achieving the goal by hiring consultants to develop and implement provincewide services for equality of results in the schools.

Although most changes will need to take place at the junior high and high school levels, we must recognize that children's awareness of their possibilities begins in the early years of life. Therefore elementary schools have a role to play in exposing their students to many forms of work and to female role models in nontraditional work.

Affirmative Action Programs

Some of the preceding suggestions for positive intervention programs are, in fact, forms of affirmative action for female students. Indeed, the educational goal of equality of results is a translation of the affirmative action principle into the educational system.

Affirmative action programs within educational institutions could be very helpful to female students. First, if female teaching personnel were hired and promoted at all levels in numbers representing the percentage of their sex in the occupation, students would see role models on a daily basis. Because youngsters – and adults – learn by precept, the visible presence of role models is essential to nonsexist learning.

Second, both universities and community colleges would make a giant step towards obtaining equality of results if they would use affirmative action plans for recruiting and supporting female students in the traditionally male-dominated fields of engineering, forestry, dentistry, and scientific research. Affirmative-action support systems must include provisions for daycare, if educational institutions really want to attract and keep adult female students.

Of course, affirmative action programs in schools can correct only part of the systemic discrimination faced by Canadian girls and women. Ms. Gaskell has taken pains in her chapter to point out the *realism* of adolescent girls. Her research shows that Canadian teenage girls may not want to invest time, energy, and money in a nontraditional education that does not offer jobs or support from the employer as the end result. Ms. Gaskell also emphasizes the success of compulsory affirmative action in the United States in opening up nontraditional sectors, companies, and university programs to women. Affirmative action in the workplace may be an essential complement to educational affirmative action, if we want to increase girls' willingness to prepare themselves for work in new areas.

As well, the interest and commitment of young women in careers in both traditional and nontraditional sectors is sure to be influenced by the hope of equal rewards. If educational institutions emphasize nontraditional skills for female students to prepare them for the job market, then employers must do their part by offering equal pay for equal work, and equal pay for work of equal value. The adolescent girls of Ms. Gaskell's research will soon pick up on these real expressions of interest from employers and will respond in kind.

Corrective Actions

From affirmative action in education and the workplace, we will move on to look at corrective actions that we can take within our provinces to improve the situation of female students. While positive intervention and affirmative action programs improve the educational system by making additions to it, corrective actions work by eliminating negative aspects or strengthening areas of weaknesses.

Obviously, the removal of sexism from the curriculum and course materials is essential to developing nonsexist attitudes in students. Sexual stereotypes in textbooks must be eliminated, and publishers must be informed that sexist didactic materials will not be bought by our departments of education.

Educators in several provinces have developed some positive strategies for counteracting traditional sexual stereotypes in schools – for instance, in developing supplementary teaching material or in making special efforts to change career counselling. In Ontario, a one-year project called "Open Doors" provides to young students the opportunity to meet and talk with women in nontraditional occupations. In Quebec, the Council on the Status of W men, conjointly with the Department of Education and Social and Cultural Affairs, has implemented a three-year program called "Pareille, pas pareils" (equal, not identical). The program's long-term goal is to create a nonsexist society for children to grow up in. The methods used include contests for producing nonsexist books and songs and activities for involving parents, who are considered by the program to be the primary source of children's socialization. These provinces' experiences could be useful to other provinces wishing to develop nonsexist material.

However, we must insist that all new programs be analysed systematically and objectively to determine their effectiveness in changing attitudes, course participation, or promotion patterns. It would be useful to have an analysis of equal-opportunity and voluntary affirmative action programs that have existed in the education departments of some provinces – for example, Ontario – to determine the effect on female participation in educational administration. While it is more difficult to determine effects on attitudes, measuring instruments can be found and must be used. We must demand accountability from all programs, including those that we, ourselves, initiate.

While sexual stereotypes are being eliminated in teaching materials, courses and curricula can be updated to promote present female strengths. Courses and educators should work to enhance girls' verbal and interpersonal skills and to demonstrate their links to career success. Courses at all levels should be developed and offered in ways that use the life experiences and interests of female students, as well as those of male students. The integration of female realities into nontraditional areas of study is particularly important to attract female students.

Career educators, charged with the responsibility of informing students about potential careers and their related requirements, must not only be aware of the present economic disparities faced by Canadian women and the past and present inadequacies of the school systems but also convinced that changes in female participation in the labour market are possible and desirable. Professional counsellors must be assisted in acquiring the skills needed for nonsexist counselling. Universities can play an important role here by offering courses in nonsexist counselling. Here, too, governments can help by offering *start-up funds* and scholarship bursaries for the on-going education of employees.

Perhaps the fundamental corrective action necessary for achieving equality of results is increasing the common core of compulsory courses for students up to, and including, grade 12. As a result, girls will graduate with math, sciences, languages, and computer literacy and be capable of continuing on in a broad spectrum of studies.

Political Action

The changes in educational policy and practice that I have been suggesting will necessitate the official and financial support of governments. Political action will likely be necessary to build political will for change.

The federal government can be useful in a variety of ways. Given the national and international influences of our labour market, the federal government may wish to initiate federal-provincial discussions on the development of a national educational goal. Also the federal government could use its educational funds to support affirmative and corrective action programs in provincial educational facilities. The monies could be offered to provinces and institutions in the same manner as language education grants. Funds could be made available in proportion to the efforts of organizations to promote a national goal of nonsexist education. The establishment of national goals necessitates the cooperation of the provinces. The example of federal initiatives in second-language education is a useful one. The provincial and the federal governments have been able to cooperate in a field of provincial jurisdiction, and the growing number of bilingual students is proof of the effectiveness of this intervention. If the equality of male and female students were given the same priority and equivalent funding and operation, dramatic changes would be possible.

At the provincial level, political action may well be necessary to encourage departments of education to take a leadership role in nonsexist education. We must assure that policy statements for equality of results are accompanied by specific curriculum changes and assignment of personnel, if necessary, to effect the changes within each province.

At the local level, we can lobby our school boards to take an active role in promoting nonsexist education. They need encouragement not only to collect data on enrolments and graduations but also to initiate programs and place personnel to achieve equality of results. Home and school associations can work to involve parents in developing local strategies for achieving nonsexist education. Parental support is fundamental for an effective local and provincial political voice.

Women's groups of all types and at all levels have an important role to play. They can stimulate community discussion on the benefits of nonsexist education and lobby their politicians for changes in educational policy and practices. By reaching out to mixed and male groups, they can broaden popular understanding and support for equality of results in education and the workplace. This outreach can be especially effective if women speak with business groups, such as the Canadian Manufacturers' Association, the Chambers of Commerce, independent business people, or service clubs. Business must become aware that it is in their self-interest to broaden the pool of skilled, capable workers and that sex differentials in the workplace only serve to lower productivity and lower competitiveness in the world market.

Conclusion

The strategies I have discussed today – data collection and distribution; positive intervention; affirmative, corrective and political action – are all building blocks for the construction of a nonsexist educational system and society. The structures will come into being if we get involved in the nuts and bolts of their creation and if we set, and respect, deadlines for their construction.

If we work together and build with care, we can improve our educational institutions so that girls, as well as boys, may discover and develop the full range of their capacities. At the same time we must build better bridges between the world of work and the world of learning, for the two are a continuum in which youngsters develop and then use their talents. The workplace itself has some structures to put in place to ensure equal opportunities and treatment for young women after their graduation. We must encourage employers to make the changes. The net result of this multipronged strategy will be an integrated workforce in which women and men will be found in all sectors and at all levels of responsibility and pay, in proportion to their numbers trained for the positions. With those changes, Canadian girls will enjoy real equality of opportunity in education, and Canadian women will achieve economic equality in the labour force.

Floor Discussion

The importance of maths and sciences for girls at the elementary and high school levels concerned a number of participants. One commented that girls have not been encouraged to develop math and science skills, either in their home environment, in socializing with friends, by their teachers – who often lack advanced skills in these subjects – or by guidance counsellors. She recommended special science and math-oriented career workshops run by women teachers to increase girls' perception of the value of these particular skills and to enable them to observe and interact with women specializing in these subjects. She also urged that greater attention be given to improving guidance counselling, especially with respect to nontraditional training. Another participant suggested that segregated classes might encourage girls to enter nontraditional courses.

Professor Gaskell advocated establishing a national program to handle precisely these issues. One impediment to girls' progress in maths and sciences, she observed, lies in the fact that these subjects, unlike English and social studies, are not compulsory after grade 10. She concurred with the observation on guidance services, underlining the need for better, nonsexist counselling. She also noted that experiments on establishing segregated classes have been successfully carried out, not only for girls in industrial arts, but also for boys in home economics.

Ms. LeBlanc affirmed the need for a compulsory core program in maths and sciences. In response, one participant suggested that simply making courses compulsory, without changing their substance, might succeed only in further alienating female students. Ms. LeBlanc agreed that first priority should go to examining current programs to ascertain whether their structure and composition tend to deter girls' entry. In defence of compulsory courses, Professor Gaskell argued that they might force teachers to change their attitudes and teaching styles and to develop more appealing curricula. As well, she said, girls would thereby acquire the prerequisites necessary for entrance into many community college and university programs.

Again on this topic, another participant said that while she agreed women should share in the opportunities provided by maths and sciences, she would not like to see women's occupations denigrated in that process.

Another area of interest centered on the relationship between education and jobs. One participant observed that the current high unemployment rate among young people discouraged them from entering training programs – particularly, in the case of girls, in nontraditional areas. Another expressed interest in finding out what kind of education is most likely to guarantee employment. In reply, Professor Gaskell said that students taking academic courses tend to do better in the labour market – with the single exception of girls in commercial programs, who are more likely to find better-paying jobs as secretaries than they would without this skill.

In this context, the need to change girls' psychology with regard to their education and careers was raised. One participant said that studies on this topic, confirmed by an unscientific sampling among her own students, show girls do not believe they will have to earn their own living on a permanent basis. Teachers will have to work to change that attitude, she said.

Professor Gaskell agreed, noting that many educators have been struck by the same observation. In her own research in this area, she recounted, she found that only one-third of girls who planned to stop work with marriage and children held the traditional attitude that "a woman's place is in the home." The remaining two-thirds took this approach for more practical reasons, including scepticism about the assistance they could expect from their spouses, unease about the quality of available child care, and a deeply rooted conviction that mothers should be home with small children.

Also discussed was the role of affirmative action programs in promoting the number of women in the education field. One participant noted that her experience at the university level indicated that very few women are involved in this area and their interest in women's education tends to be lukewarm. Professor Gaskell replied that while women are generally underrepresented on university faculties, she had not encountered a lack of concern on the part of women educators. In response to a query from another participant on the effect that affirmative action quotas might have on increasing the number of women in this field, Professor Gaskell stressed the need for more data on the subject. Ms. LeBlanc, while pessimistic about the short-term value of affirmative action programs, was confident of their greater success in the long term. Measures to promote and enforce bilingualism in a similar experiment, she pointed out, ultimately had the positive effect of bringing many children into immersion schools.

6 Equal-Pay Policy

Presentation by Roberta Edgecombe Robb

Since the early 1970s, a considerable literature has been devoted to analysing occupational distributions and earnings differentials, by sex, in the Canadian labour market.[1] Recent studies focusing on the occupational distribution issue show that despite clear indications of movement of females into (historically) male-dominated occupations during the 1970s, there is still continued, marked segregation of occupations by sex in Canada. The data show, for example, that while the percentage of women employed in managerial occupations increased by approximately 44 per cent between 1975 and 1980 (from 3.4 to 4.9 per cent), over half the employed female labour force (53 per cent) was still concentrated in the broadly defined clerical and service occupations in 1980.[2] The comparable figure for males is only 16.4 per cent.

Empirical studies focusing primarily on the question of earnings differentials by sex, moreover, have shown a clear link between occupational segregation and the existence of lower earnings (on average) for women.[3] Two points should be noted about these analyses: first, the methodology, data, and precise estimates of the components of the male/female earnings differential differ somewhat in the various studies; second, imprecise measures of certain productive characteristics (e.g., work experience) and possible omitted variables (e.g., kind of education) require that the size of each component be treated with caution. Bearing this in mind, however, the approximate estimates of the components of the male/female earnings differential in Canada appear to be as follows: based on an unadjusted female/male earnings ratio of 0.60, regression analysis based on census data shows that adjusting for measured productivity characteristics (education, age, etc.) and *broad* occupational and industrial distribution raises the ratio to within the range of 0.75 to 0.85 – or, on average, 0.80. Although further decomposition into the portion attributable solely to personal productive characteristics (exclusive of occupation and industry) should be interpreted cautiously, evidence from Robb and from Shapiro and Stelcner[4] suggests that about 10 percentage points can be attributed to differences in experience, marital status, etc.

Further results from case studies utilizing data on narrowly defined occupations within an establishment show an adjusted female/male earnings ratio of 0.90 to 0.95 indicating that pure wage discrimination – that is, wage differentials within narrowly defined occupations in the same establishment – accounts for perhaps 0.05 to 0.10 of the overall differential. Considering these various statistical results together, therefore, seems to suggest that, *at a maximum*, occupational and industrial segregation accounts for about 20 percentage points, or for about half the overall male/female gap. This figure seems to be not inconsistent, moreover, with the results obtained from various job evaluation studies. U.S. studies[5] that hold job evaluation scores constant across occupations, for example, suggest that the adjusted female/male earnings ratio is 0.80. Similarly, higher productivity-adjusted ratios (0.79, 0.86, and 0.97 – an average of 0.87) are to be found in the Walmsley, Ohtsu, and Verma study[6] of a single Saskatchewan firm. As noted by Gunderson,[7] however, not all of the 0.20 gap remaining, found in U.S. studies, is likely to be the result of *discriminatory* occupational segregation. Some difference in the occupational distribution may reflect pre-labour market factors (women crowd into certain jobs because they get the "wrong kind" of education and training, for example) or preferences. These factors are discussed in more detail in the next section.[8]

In response to this understanding of the link between occupational segregation and wage differentials by sex, the federal and Quebec jurisdictions have introduced equal-pay-for-work-of-equal-value legislation that allows for pay comparisons across occupations as opposed to within occupations.[9] The federal legislation was enacted on March 1, 1978, and prohibits employers from establishing or maintaining differences in wages between male and female employees in the same establishment who are performing work of equal value.[10] The criterion to be used to assess the value of work is based on the composite of skill, effort, and responsibility required in the performance of the work and the conditions under which the work is to be performed.[11] There are, however, provisions for differential wages if the existence of "reasonable factors" can be demonstrated. These reasonable factors consist of: different performance ratings (merit pay); seniority (experience); red circling (downgrading of a position resulting in wages that are temporarily fixed or wage increases that are temporarily curtailed); rehabilitation assignments (wages higher than justified by the value of work while the employee recuperates from an illness of limited duration); demotion pay procedures; temporary training positions (trainees may receive lower wages than employees who work in such positions on a permanent basis); and labour shortage and change in the work performed. The Human Rights Commission is quick to point out, however, that these factors justify a difference in wages only "if they are applied consistently and equitably in calculating and paying the wages of all male and female employees in the same establishment who are performing work of equal value."[12]

Clearly, the main thrust of the legislation is to eliminate existing male/female wage differentials resulting from occupational segregation. Moreover, by pushing for a reappraisal of existing compensation and job evaluation systems in organizations under the federal jurisdiction, the Commission hopes to prevent future occurrences of such differentials.[13] The important assumption underlying the legislation is the belief that some employers have been, and are, sex-biased, in the sense that they have placed greater value on "male" job qualifications than on "female" ones. For example, it has been argued that the amount of physical effort required in some male jobs has been given more weight than, say, the mental effort required in certain female jobs. Hence, even though in some "objective" sense the women's jobs might be of equal value to those of males, they are systematically undervalued by the employers, which results in lower wages for such jobs. The legislation, therefore, "challenges the economic principle of supply and demand, considering that it has been distorted in its application to the wage market because the methods used to categorize the wage market were developed on the basis of unbalanced factors."[14]

To date, nine disputes involving equal pay for work of equal value have been settled or are currently being investigated in the federal jurisdiction, some involving substantial financial settlements.[15] The recent (1982) dispute involving 2,300 female and 1,000 male general service workers, for example, resulted in a settlement of $17 million in back payments and an annual cost of $1 million in salary increments.[16] While the intent of such legislation is clearly admirable and few would quarrel with its basic aims, it seems useful, from an economic viewpoint, to consider the effects of enforcing such legislation in the labour market. The purpose of this chapter, therefore, is to analyse the legislation as follows: first, the concept of equal pay for work of equal value is discussed both in the context of wage setting in competitive markets and of wage setting in internal labour markets. This is done for the purpose of gaining a clear economic understanding of the concept of "equal value" and of raising some issues about potential operational difficulties of such a policy. Second, we focus on the effects in the labour market of actually enforcing equal pay for work of equal value. It is argued in this chapter that such effects depend on how and why occupational segregation occurred. To this end, some alternative hypotheses of the causes of occupational segregation and wage differentials are briefly reviewed, and the effects (or usefulness) of enforcing the equal-pay-for-work-of-equal-value legislation are discussed in each case. Third, we try to address, directly, whether or not the legislation can achieve its objectives either in its current or modified form, and whether such legislation is the only policy required for improving the economic status of women. Fourth, we present the summary and conclusions.

The Economics of Equal Pay for Work of Equal Value in Competitive and Internal Labour Markets

The Concept of Equal Pay for Work of Equal Value in Economic Theory

In Section 11(2) of the Canadian Human Rights Act, it is clearly stated that the criterion to be applied to assess "the value of work" to a given employer (within a given establishment) is the composite of skill, effort, and responsibility required in the performance of the work and the conditions under which the work is performed. At first glance, the term "value of work" seems to imply that the value of output is being assessed. A closer examination of the criterion, however, indicates that this is true only indirectly. In fact, the composite of skill, effort, responsibility, and working conditions is actually an explicit measure of job requirements and characteristics and (in the case of skill, effort, and responsibility) an implicit measure of the productive characteristics of the worker (assuming that job requirements reflect at least minimum levels of skills and abilities embodied in the worker). Using this interpretation, therefore, the criterion can be thought of as a measure of the inputs and not the outputs. Under certain conditions, however, jobs that are of "equal value" in the sense that the composite of the job requirements and characteristics are equal does imply that, at the margin, the value of the output in the two occupations will also be equal. This can be seen quite easily from the conventional model of competitive markets. Let us assume, for example, that we have two occupations with given sets of jobs requirements (skill, effort, responsibility) and job characteristics (conditions under which the work is performed). If there are workers who have (or are able to obtain) the requisite skills and abilities to do either job, and if they are indifferent between the two jobs (job characteristics may differ somewhat between the two occupations, but they are offsetting), in the long run individuals should supply themselves between the two occupations until the wages in the two jobs are equal – that is, until the return to a given package of skills, levels of effort, responsibility, working conditions, etc., is the same in all alternative uses. Profit-maximizing employers will then hire workers until the marginal revenue product (MRP) – a measure of the output – is equal to the wage. Hence, in the long run (under perfectly competitive assumptions) it is the case that workers would be paid equal wages for work of equal value. In this sense, therefore, the concept does have some basis in conventional economic theory. There are some important cases, however (not currently allowed as reasonable factors), when jobs with similar requirements and characteristics will not be paid equal wages even in perfectly competitive markets. Preferences or tastes for a particular job, for example, will result in short-run, and possibly long-run, wage differentials between some occupations, and it is argued that the existence of such differentials may create some operational problems for the legislation. In particular, difficulty in recognizing and/or weighting such differentials may result in the Canadian Human Rights Act being improperly applied in the sense that all such differentials may be labeled discriminatory and the resulting correction will have negative allocative effects in the labour market.[17] It is to this discussion that we now turn.

Potential Difficulties of Applying Equal-Pay-for-Work-of-Equal-Value Legislation When Wages Are Determined in Competitive Markets

An important example in competitive markets of when jobs with similar requirements and characteristics might well result in unequal wages is the case where overcrowding (a large supply of workers relative to demand) occurs in certain occupations, depressing both the marginal product and the wages of workers in those occupations relative to those in jobs with similar characteristics. Two likely causes of overcrowding are workers' preferences or tastes for, or against, certain types of jobs or some form of pre-labour-market discrimination that restricts the range of occupations open to a particular race or sex group in the labour market.[18]

With respect to workers' preferences, the theory of competitive equilibrium wage differentials that serve to "compensate" workers for some undesirable characteristics of the job is well developed in economics.[19] *Ceteris paribus*, those occupations which have higher risk of injury, greater instability of employment, etc. often command wage premiums relative to other jobs with otherwise similar job requirements and characteristics. Preferences between jobs can also occur simply because of differing tastes for a particular line of work. In choosing between university options involving the same amount of investment time, for example, some individuals will choose to be economists, some to be classicists, etc. If such tastes result in an oversupply (relative to demand) in some occupations, then wage differentials between jobs of equal value will occur here as well.[20]

The existence of occupational preferences in labour markets creates an operational problem for the equal-pay-for-work-of-equal-value legislation in the sense that such differentials may be difficult to identify, or at least may be difficult to capture adequately in job evaluation schemes. Such an identification problem may be more likely to arise if the occupational preferences are based on taste for a particular line of work, as opposed to preferences for jobs that are less risky, have less employment stability, etc. In the latter case, it might be argued that the category "conditions under which the work is performed" would pick up any substantial differences of this sort so that the jobs being compared would not, in fact, be classified as being of equal value. Even allowing for this contingency, however, we note that such factors may be very difficult to weight accurately. It is clearly the case, for example, that when the wage premium in such jobs is determined by competitive markets, it is preferences of the individuals at the margin that, in effect, determine the size of the premium. Many individuals in a risky occupation earn rents in the sense that they would be willing to work in the occupation for less than the prevailing wage because they do not place as much weight on the risk factor as the individual at the margin. The important issue, therefore, is whether or not job evaluators will weight such factors in the same way as the market. If not, then some or all of a legitimate compensatory differential might be mistakenly eliminated by the application of the legislation. In such a case, major difficulties would be created for firms in terms of attracting a sufficient supply of workers to risky or otherwise unpleasant occupations.

Overcrowding resulting from some form of discrimination (pre-market or market) also results in lower productivity and wages for workers in those occupations relative to workers in occupations with similar characteristics.[21] Moreover, while it may seem merely a question of semantics to say that while discrimination resulted in segregation, it was the oversupply problem that created the wage differential, we note that the distinction does become important in the context of applying the equal-pay-for-work-of-equal-value legislation. If such a differential is labeled as purely discriminatory, then raising the wage may result in reduced employment opportunities for women (we elaborate more on this point later).

As a final comment in this discussion, we note that underlying these potential difficulties of accurately diagnosing any given differential that appears in a competitive market is the general and fundamental problem of trying to decide when two jobs are of equal value and when in fact they are not. Job evaluation is clearly not an exact science, and the process of trying to estimate marginal products through such a process is a very difficult and subjective one. In the final analysis, the Humans Right Commission, in evaluating a complaint, will have to decide whether the employer has given reasonable weights to the various factors involved in the jobs, or whether the weighting is, in fact, due to some prejudice in the employer's mind. In other words, the Commission will have to assess the value of work, and while blatant abuses of job evaluation between jobs that are very similar in nature may be easy to discern, they are not likely to be at all easy to discern in jobs that may be very different in nature.

Equal Pay for Work of Equal Value When Wages Are Determined in Internal Labour Markets

In recent years, the assumption that supply and demand are of *primary* importance in wage and employment determination has been challenged by the institutionalists' school. They emphasize, instead, the role played by custom, institutional practices, administrative rules, etc. A central theory in this literature is that of the dual labour market, in which it is hypothesized that the labour market is divided into a primary sector and a secondary sector that for all intents and purposes are noncompeting.[22] Although there are a number of features that distinguish one sector from another,[23] of interest in the equal-pay-for-work-of-equal-value context are the assumptions made about the prevailing market structure and wage determination in each sector. In the case of the secondary sector, both the labour and the product markets are assumed to be competitive. In the primary sector, on the other hand, the product markets are assumed to be noncompetitive (usually oligopolistic), and the labour market is assumed to be characterized by well-developed internal markets within the firm. While there is not complete agreement as to why internal markets develop in certain firms,[24] there is some consensus that the existence of an internal market implies that at least some jobs in the firm are shielded from direct wage and employment competition in the external market. In fact, it is hypothesized that firms that have internal labour markets have recourse to the external market only at certain points of entry – usually jobs at the bottom of some particular occupational ladder. Wage setting in this context is often done through a complex procedure of job evaluation, using the characteristics and (market) wage in certain "benchmark jobs" as the basis for comparison.

Although it is outside the purview of this chapter to debate the validity and/or usefulness of dual labour market theory, it is suggested that the hypothesis of the existence of internal labour markets is not without merit. The very fact that many firms (albeit usually large firms) use job evaluation schemes extensively suggests that there are, at least, some jobs for which there may be no well-developed external market – jobs with a high degree of firm-specific training, for example, might fall in this category. In such internal markets, it is perhaps tempting to hypothesize that internal wage equity would assume more importance than external equity and that, assuming employers are not discriminators, wages between jobs with similar job evaluation scores would be closer than they might otherwise be if wages were taken solely from the external market. Two points seem worth noting here. First, there is, of course, no reason to assume that all discriminatory wage differentials are "imported" from the external labour market. Such differentials can, and clearly do, originate in the internal market itself. Second, to the extent that the internal market may be strongly linked to the wages in the external market through the benchmark jobs, then all the features of the competitive market (discriminatory differentials, compensating differentials, etc.) will also be reflected in the wage structure of the internal market. Indeed, to the extent that workers are primarily concerned with the present value of lifetime earnings (as opposed to their wages at any point in time), it could be argued that while firms with internal markets have some control over the shape of the wage profile, they could not offer earnings streams with present values substantially different from the workers' alternatives in the external market.[25] In other words, despite the fact that some jobs might be protected from direct wage and employment competition, and hence employers have some flexibility with respect to wage setting, the existence of ports of entry (and exit) at various points makes it difficult for the firm to escape entirely the pressures of the external market. Hence, differentials between jobs with the same requirements and characteristics can arise in internal labour markets as well as in competitive markets, raising the same problems of enforcement of the equal-pay-for-work-of-equal-value legislation, although the consequences may be mitigated somewhat.

To summarize, therefore, we have argued in this section that the criterion used to determine equal value is really a measure of job requirements (in terms of inputs) and job characteristics. Only indirectly can it be thought of as a measure of the value of work (output). Moreover, while the competitive model, under certain assumptions, predicts equal pay for work of equal value in the long run, there are sources of differentials between jobs with otherwise similar characteristics that could not be labeled discriminatory. To the extent that such differentials are difficult to identify, or difficult to weight properly even if they are identified, then enforcing the equal-pay-for-work-of-equal-value legislation in firms that use market wages or firms with internal labour markets that are nevertheless strongly linked to the external market may result in errors. In particular, to the extent that nondiscriminatory wage differentials are inadvertently eliminated, firms may have difficulty attracting labour into certain occupations and, in other cases, women may find that job opportunities in traditional female occupations may be reduced.

Occupational Segregation and the Impact of Equal Pay for Work of Equal Value in the Labour Market

In this section, we address the following issue. If discriminatory differentials are, in fact, diagnosed (the difficulties of doing so notwithstanding), what are the likely effects in the labour market of enforcing the legislation? In addressing this question, it is argued that the effects of enforcement depend on how occupational segregation and occupational wage differentials by sex occur. Hence, a brief review of models based on the work of Becker, Bergmann, Arrow, Phelps, Thurow, Doeringer and Piore, and Polachek is presented.[26]

Alternative Hypotheses of Occupational Segregation and Wage Differentials

In Becker's analysis, discrimination occurs because the employers, the employees, and/or customers are prejudiced against a certain group in the labour force. If employers do not like hiring females, they will do so only if there is an incentive such as a reduced wage. If the majority of people in the workforce (i.e., males) dislike working with females, they will be willing to do so only if there is some incentive such as a wage premium. And if customers dislike dealing with female workers (or dislike using products produced by females), they will do so only if there is an incentive such as a reduced price, which in turn would lead to a reduced female wage.[27] In all these cases, the proportionate male/female wage differential that arises as a result of discriminating behaviour has been referred to by Becker as the "discrimination coefficient *d*."

Although Becker's theory is presented as an analysis of discrimination within a given occupation, we note that occupational segregation can be considered as a special case. The key to the use of this theory as a model of occupational segregation lies in the fact that the discrimination coefficient *d* is assumed to differ in size not only by employer, but also by occupation. In particular, males (both employers and employees) may require greater compensation (larger *d*) to work with females in jobs that they perceive as "male jobs," but require little or no compensation for associating with women in jobs that they perceive as "women's jobs."[28] In fact, if the discriminatory preferences are large enough in certain occupations, no women at all may be employed in these jobs; they will "choose" to work elsewhere. In an earlier paper, using a simple two-occupation case, Robb[29] shows that whether or not wage differentials occur when discriminatory tastes result in occupational segregation of equally productive males and females into "male" and "female" jobs depends on a number of factors. On the one hand, if employers are neutral towards women in female occupations – that is, if they do not require to be compensated (in terms of reduced wages) for hiring females to do female jobs – two clear predictions emerge. (1) The female occupation may be integrated with males and females earning the same wage. This wage can be shown to be the same as that of the equally productive males in the (totally male) male occupation. (2) If overcrowding of females in the female occupation occurs, however (as analysed by Bergmann), then the female occupation will contain only women, and their wages will be lower than those of equally productive males in male occupations.[30] On the other hand, if employers discriminate against women in the female occupations as well (albeit to a lesser degree than in male occupations), then wage differentials between equally productive males and females will almost certainly occur. If supply conditions are such that there are males in the female occupation, there will be wage differentials between equally productive males and females exactly equal to *d*, the required compensation for hiring females.[31] But, again, if overcrowding occurs and depresses the wage, the males will choose to work in the higher-paying male occupation, and the females (in the female occupation) will earn wages less than those of the equally productive males in male occupations.

In the case in which the employer himself is not prejudiced but his male employees are, then the occupational segregation may take place for the reasons suggested by Arrow. For example, male unskilled workers may prefer male supervisors to female ones. If female supervisors are used, the employers would have to compensate the male unskilled labour force with higher wages.[32] Rather than do this (because of the competitive cost disadvantage involved), the employer may simply refuse to hire females in supervisory or managerial positions. Employee discrimination of this type, therefore, may lead to occupational segregation along skill lines (females are excluded from any professional or skilled jobs that might entail supervising males), and occupational wage differences due to the differing human capital requirements might be an inevitable result.

An alternative approach to the Becker/Arrow framework for explaining occupational segregation is suggested by the works of Phelps, Thurow, and Doeringer and Piore. Phelps developed a theory based on the hypothesis that an employer who wants to maximize expected profit will discriminate against women if he believes them to be less productive, or less stable, employees than men, on average. It need not be true that all members of the group are, in fact, less productive, but if the cost of gaining information on individuals is high, then sex may be taken as a proxy for productivity so that individuals are assumed to have the characteristics of the group. This has been called "statistical discrimination," and it can lead to wage differentials, occupational segregation, or both. In the context of Thurow's job competition model, for example, statistical discrimination can play a large role in generating occupational segregation. If employers rank women very low in the employment queue for jobs requiring extensive on-the-job training (because as a group it is believed that they do not have the required background characteristics), then they will be simply excluded from those jobs. To the extent, therefore, that some women will have productive characteristics identical to those of men and hence the potential to be as productive as these males, they will nevertheless have different occupational distributions and potentially lower actual productivity and earnings if statistical discrimination occurs.

Given the prediction (from both the statistical discrimination and Becker's taste model) that women may be completely excluded from certain jobs in the economy, it might be argued that such discriminatory behaviour is a possible mechanism by which women (or some other minority) could be assigned to the "secondary" market hypothesized in Doeringer and Piore's dual labour market theory. And once "assigned" to the secondary labour market, it seems clear that segregation can become self-perpetuating. As employees acquire the working characteristics of the secondary market (little or no training and a reputation for high turnover, for example), this creates further barriers to them being considered for jobs in the "primary" labour market. To the extent that the jobs in the secondary sector are truly less productive than those in the primary market, then the wages of females (who are assumed to be able to do either job) may well be lower than those of males.

A final hypothesis on the causes of occupational segregation focuses on the supply side of the market. Recent empirical work[33] shows that intermittent work experience imposes costs (in terms of lower current earnings) because of the deterioration of skill and of the forgone appreciation of earnings that result from lost experience during the period of absence from work. Formalizing this model in terms of a human capital model, Polachek hypothesizes that if the loss of earnings potential that can be attributed to work intermittency – the atrophy rate – differs by occupation, then individuals who expect to participate in the labour market in an intermittent fashion might well choose occupations with low atrophy rates. In other words, given males and females with identical work characteristics (years of schooling, etc.), if females expect to be out of the labour force for a period of time raising children, for example, then this fact alone would cause different occupational distributions between men and women if occupations have different atrophy rates.[34] Whether or not wage differentials between equally productive males and females would arise in this case is not clear. In the absence of any demand-side discrimination, the existence of wage differentials would seem to depend on the particular jobs that women chose to supply themselves to, and on whether or not they were prepared to "pay" for their preferences in terms of reduced wages should overcrowding in these jobs occur.

To summarize, therefore, occupational segregation and, in some cases, wage differentials between equally productive males and females are predicted from all of the above models. In light of this analysis, we turn now to a consideration of the effects in the labour market of enforcing equal pay for work of equal value under each of the alternative hypotheses.

Enforcing Equal Pay for Work of Equal Value: Labour Market Effects

As outlined at the beginning of this chapter, one of the assumptions underlying the equal-pay-for-work-of-equal-value legislation is the belief that some employers are sex-biased in the sense that they place greater value on male job qualifications than on female ones. It could perhaps be argued that such behaviour is consistent with Becker's hypothesis where, as noted earlier, if employers have a taste for discrimination, they behave as if females were less productive than comparable males. This prejudice could, of course, manifest itself through the market or through the job evaluation schemes that some firms use to rank occupations in terms of their value or productivity. Discriminating employers are assumed to place lower weights on the factors (skill, effort, etc.) that are used as indirect measures of the value of the women's jobs in the firm. Consequently, under these circumstances, wages in the female jobs would be lower than in the jobs of equally productive males.

To analyse the effects of enforcing the equal-pay-for-work-of-equal-value legislation in the Becker/Bergmann model presented earlier, let us consider a specific example in which there are two occupations: typist (a female job) and mail clerk (a male job). In Robb's analysis,[35] it is shown that the effects of applying the legislation in the case where employers discriminate against women in the typing occupation as well as in the mail clerk occupation (from which it is assumed women have been excluded) depend on whether or not the typing occupation is completely segregated or not. If there are no male typists (i.e., overcrowding of females has resulted in complete segregation), a number of things might occur if the Human Rights Commission diagnoses a discriminatory wage differential between the typists and the mail clerks. First, suppose for the moment that the legislation covers all firms hiring typists and the Commission forces them to raise the wages of typists to that of the mail clerks. In this case, reduced employment will occur although its extent is not entirely determinate in the model. The prediction of reduced employment results from two factors: (1) as the wages of typists rise, profit-maximizing firms adjust employment until the marginal revenue product is equal to the higher wage; and (2) because the employers are assumed to be discriminators in the first place and have to be compensated for hiring women, forcing them to pay females the same wage as some other (equally productive) males makes the employers' subjective cost of females higher than that of males. In this case, employers might conceivably try to replace the female typists with male typists, and employment of female typists could fall to zero. We would argue, however, that this is highly unlikely, at least in the short run, because of the existence of antidiscriminatory employment legislation. However, at the very least, as typing positions become available, women will undoubtedly encounter increased competition from males for these positions, and to the extent that employers can circumvent the employment legislation, new hires may go to males.

Second, we note that if female wages are raised to the male wage, this is likely to imply too high a wage level. In other words, the wage level that would clear the market presumably lies somewhere between the female and male wages.

Third, if not all firms are covered by the legislation (as is currently the case), then if typists are laid off in the covered sector because of the application of the legislation, they may move into the uncovered sector and drive down the wages for typists there.[36]

Fourth, if the legislation is directed only at one firm (or a few firms) in the market, then this firm will be put at a cost disadvantage vis-à-vis its competitors in the sense that now it has to pay higher wages for its typists. Some additional unemployment of female typists may result because the firm may be forced out of business because of the cost disadvantage.

Alternatively, if we consider the case where the typist occupation is integrated (i.e., there are in fact male typists, although the employer may have given them the title "executive assistants," for example), then the Human Rights Commission would most likely compare female typists with this group, providing the group is large and easily identified. In this case, the wage of the female typists will initially be lower than that of the male executive assistants by exactly the amount of the discrimination coefficient in the female job. In this case, the effect of forcing the firm to pay typists the same wage as the male executive assistants should not result in any drop in total employment (males plus females) from its original level. However, as with the previous case, to the extent that firms are able to choose the (subjectively) lower-cost males, they will replace the females and give new positions to males.

In summary, we suggest that in terms of eliminating wage differentials that occur when employers discriminate in this way, the result is likely to be that some women will be better off if the legislation is enforced: those who keep their jobs will be paid the same as the males, although their wage may still be lower than the value of their marginal product. At the same time, some women may be made worse off. Specifically, some women may become unemployed and have to compete for women's jobs elsewhere in the economy, possibly at lower wages than before. Moreover, the female workers in the affected firms may now find they are competing with males who find the female occupation attractive at higher wages. And if the original source of the discrimination was an employer's preference for males, this may now result in promotions and new hires going to males. It is important to emphasize at this point, however, that the theory is unable to predict the size of any of these effects, although they are likely to be larger, the larger the initial wage adjustment. The structure of the product market should also influence the size of the employment effects. To the extent that labour demand curves are inelastic because firms have some monopoly power in the product market (and hence can pass on increased wages in increased product prices), the employment effects might be smaller. If both labour and product markets are competitive, on the other hand, we might expect the effects to be larger. But even in competitive markets, it could be argued that firms might be able to absorb or offset the increased labour costs – particularly if these costs are phased in over time, as the Human Rights Commission allows. The possibility that the higher wages will allow the firm to attract higher-quality (more productive) workers, for example, might be one way of offsetting higher costs and mitigating the employment effects. It is important to note, however, that such factors might not be able to eliminate all the employment effects. Presumably firms that have been hit (historically) by minimum wage legislation, for example, also had ways of absorbing the increased wages. Yet, although researchers disagree on the precise magnitude of the employment effects in this case, there seems to be agreement that there are effects, particularly among teenage workers.[37]

In the foregoing analysis, the assumption has been made that the occupational segregation has taken place along lines of equal value. It was noted earlier in this section, however, that occupational segregation by sex into jobs with very different characteristics can also occur. Indeed the very nature of statistical discrimination, for example, suggests that women will be excluded from jobs that require extensive formal or informal on-the-job training. To the extent, therefore, that Beckerian or statistical discrimination has resulted in women being segregated in the truly low-productivity "Joe jobs" of the economy that cannot under any productivity criteria be compared equally to those of men (even though women could do the men's jobs equally well), the legislation, naturally, cannot be expected to help very much with the problem of female job ghettos. Moreover, as Polachek suggests, some occupational segregation may be the result of women's own preferences about jobs. If enforcement of the legislation results in reduced employment in such cases, then some women will certainly be made worse off.

In summary, equally productive males and females could be segregated (through discrimination) into jobs that have similar requirements and characteristics, or they could be segregated into jobs with different characteristics. In a Becker-Bergmann world, applying the legislation to discriminatory differentials will make some women better off, but it will make some women worse off in that they may become unemployed. The model, however, cannot predict the size of the employment effects, although they are likely to be larger, the larger the initial wage adjustment and the more competitive the markets.

If, however, discrimination has segregated women into jobs that cannot be favourably compared with some male job (males get jobs requiring more training, more responsibility, etc.), then the equal-pay-for-work-of-equal-value legislation will not apply.

Equal Pay for Work of Equal Value: An Overview

In the preceding two sections we have tried to give a clear idea of what equal pay for work of equal value means in an economic context, the difficulties in applying the legislation properly, and the likely effects in the labour market if it is enforced. In this section we address two more general questions: first, can the legislation achieve its stated objectives whether in its current or some modified form; and, second, is equal-pay-for-work-of-equal-value legislation the only type of policy necessary for improving the economic status of women?

At the beginning of this chapter, the statistics presented indicated that wage differentials between jobs with equal-job-evaluation-point scores may well be in the order of 10 to 20 percentage points, although not all of this gap is likely to be discriminatory. Equal-pay-for-work-of-equal-value legislation does, therefore, have potential for improving the economic status of women. As currently formulated and implemented, however, there are a number of problems that may limit the overall effectiveness of the policy. First and foremost are the problems of the lack of extensive coverage and the complaint-initiated provisions of the legislation. Apart from the obvious problem that incomplete coverage means fewer people affected, there is the additional problem (as indicated earlier) that potential movement of workers (who may become unemployed because of the enforcement of the legislation) into the uncovered sector may result in lower wages there for traditional female jobs than is currently the case. The complaint-initiated procedure, moreover, is bound to mean that progress towards wage equality will be incredibly slow. The establishment through collective bargaining of a strong commitment to the equal-pay-for-work-of-equal-value concept,[38] as well as spot checks initiated by the Human Rights Commission (and fines for firms found to be not complying with the law), might provide a spur to voluntary action that would speed up the process.

A second problem arises from the fact (as indicated previously) that there is evidence suggesting that there is a considerable difference in the wages paid for jobs of equal value across the same sex. Hence, when complaints are filed, there is the difficulty of deciding to which male wage the female wage should be adjusted. In the United States, the practice seems to be that the female wages are raised to the "pay line" (i.e., the regression line of best fit of the male and female wages[39]), whereas in Canada, while the method of comparison differs somewhat in each case, the procedure used for the general service workers, for example, is to equalize each female subgroup pay line to the *average* pay line of the male groups.[40] In both the United States and Canada, however, the resulting adjustment appears to be in the order of 10 percentage points. Extrapolating from this admittedly limited base, therefore, it would appear that the scope for the equal-pay-for-work-of-equal-value legislation is the elimination of approximately 10 percentage points of the overall male/female wage differential.

Third, we note that to the extent that some firms and industries become totally female-oriented, a relevant male comparison group may be nonexistent. In such cases, the legislation will be unable to help with the problem of female job ghettos. And, finally, we reiterate that improving the status of some women in terms of higher pay may result in some unemployment for others. It is argued, however, that such costs may well be small and very likely to be of short duration.

To the extent that a large portion of the male/female wage differential is caused by factors other than market wage discrimination, it is argued that policies affecting the household division of labour (e.g., daycare), affirmative action, contract compliance, and policies aimed at eliminating gender-stereotyped educational streaming are absolutely vital. Overcrowding of women into low-paying female jobs, for example, may be a result of employment discrimination or pre-market educational streaming that results in girls getting the "wrong" kind of education. Wage differentials resulting from this will require affirmative action and a changing of the current cultural norms regarding gender roles in the home and in the market. While this change has already started, there is clearly still a long way to go.

As a final comment in this section, we note that it could be argued that employment policies, such as affirmative action and contract compliance that will change the occupational structure in the long run, will also be able to eliminate discriminatory wage differentials in jobs of equal value. Under these policies, movement between male and female jobs would presumably help to equalize wages, and the allocative mechanism of the market would remain unimpaired. Moreover, *if* it could be shown that there is any cost advantage (in terms of administrative and enforcement costs, for example), then it might be asked whether or not employment policies should be pursued instead of the equal-pay-for-work-of-equal-value legislation. It is maintained in this chapter, however, that such policies should be supplementary to, and not substitutes for, the equal-pay-for-work-of-equal-value legislation. While it is clear that equal employment opportunities and affirmative action may be very useful to new entrants, they may do little to help the stock of existing female workers who are now unable (or unwilling) for whatever reason to acquire new skills or to move to new (traditionally male) occupations. Equity considerations surely demand that to the extent that such women are truly discriminated against vis-à-vis equally productive males, they should be better compensated.

Summary and Conclusion

In this chapter, it has been shown that the concept of equal pay for work of equal value does have some basis in economic theory. In the long run, the conventional model of perfectly competitive markets predicts that workers in jobs with similar requirements and characteristics will produce equal marginal revenue products and receive the same wages.

Wage differentials between jobs with similar characteristics can arise in competitive markets for reasons other than the existence of market discrimination, however. Compensatory differentials, or differentials caused by some form of pre-labour market discrimination, for example, are consistent with perfectly competitive markets. To the extent that such differentials may be difficult to identify or to weight accurately, eliminating them through the application of the equal-pay-for-work-of-equal-value legislation may cause allocative problems in the market and unemployment in traditionally female jobs. Recognition of such differentials, however, and extreme caution in enforcing the legislation in any particular case, might mitigate these problems.

In the cases in which wage differentials are accurately diagnosed as discriminatory, the enforcement of the legislation, while making some women better off, may not be without costs. Reduced employment opportunities resulting from increased wage costs and/or from discriminating employers' reactions to being forced to pay women the same wage as men, for example, are a likely result of enforcing the Act. The sizes of these employment effects, however, are difficult to predict.

In the final analysis, it is argued that the legislation is useful and should not be withdrawn, although some modification of the way in which it is currently administered is probably necessary. In those cases in which some of the existing stock of female workers are receiving lower wages than male workers in jobs of equal value, the legislation should be rigorously enforced. To help new entrants, however, and to eliminate the portion of the wage differential caused by segregation of men and women into jobs that are not of equal value, policies such as equal employment opportunities, affirmative action, contract compliance, etc. may be better suited.

Comments by Francine Fournier

Available on request from the Economic Council of Canada, Information Division.

Floor Discussion

A varied number of questions and comments followed the two presentations. Some discussion arose concerning Professor Edgecombe Robb's observation that enforcing equal-value legislation may cause unemployment in traditionally female jobs. One participant suggested that this is not a pressing issue, since settlements, even at the federal level, have been few, and complaints have decreased. Professor Edgecombe Robb pointed out that the unemployment effects of the legislation could well be greater in the private sector, where demand is possibly more elastic. Another participant noted, and Professor Edgecombe Robb agreed, that the unemployment problem for women arises not only when firms replace them with men, but also when they substitute either machines or capital.

Another question put to the speakers concerned who would design, administer, and arbitrate a national system of equal-pay enforcement; and, further, what costs and consequences would result from a scheme imposing, in essence, administered prices and wages. Professor Edgecombe Robb foresaw potential difficulties in combining nationwide coverage with various independent schemes. Ms. Fournier suggested that procedures might follow the Quebec model, where analysis is done on a firm-by-firm basis rather than by imposing a rigid set of criteria.

A few participants found that Professor Edgecombe Robb's presentation did not sufficiently emphasize the benefits of enforcing equal-pay legislation. They pointed to such advantages as greater productivity, higher wages leading to more consumer spending, and further occupational diversification. Others suggested that efforts should be directed more at enforcing equal-opportunity principles through affirmative action than at promoting equal-pay measures. On this issue, Professor Edgecombe Robb stressed the need for both approaches: the former benefits new entrants to the labour force, she said, while the latter helps older women who lack opportunities for further training.

Another participant noted that evaluating and comparing jobs depends to a large extent on judgment and on the values ascribed to different components – such as responsibility, danger, and so on – which make measurement very difficult. He also argued it would be a mistake to ignore market forces in this exercise, a comment that led one participant to point out that market attitudes have discriminated against women by denying their right to earn a fair wage. Finally, he suggested that the best approach, with the most lasting effect, lies in changing attitudes towards women in the labour force rather than in imposing a rigid set of regulations. To that remark, Ms. Fournier replied that both methods are equally important.

Another participant queried whether equal-pay legislation might not undermine the right of unions to establish wages through collective bargaining. Professor Edgecombe Robb answered that the union movement appears to have made a commitment to equal-pay principles and consequently would probably uphold them in wage negotiations. Ms. Fournier added that collective bargaining is required by law to be nondiscriminatory in nature: any agreements not respecting that principle, she said, would be invalid.

Finally, one participant drew attention to the fact that equal-pay legislation was designed to improve benefits for all Canadian workers, not exclusively female ones. Another commented that the real problem in many cases lies in variations among occupations rather than between men and women within occupations. Ms. Fournier agreed with these observations, noting that legislation in Quebec was set up to prevent discrimination in general, although in practice only the male/female aspect has been dealt with.

7 Fringe Benefits and the Female Workforce

Presentation by Louise Dulude

Gertrude Stein, a notorious writer, once wrote: "A rose is a rose is a rose." When we come to the subject of labour conditions, however, we cannot simply say: "A wage is a wage is a wage," because in many cases the wage actually turns out to be a fringe benefit. This is evident in the wording of the Canadian Human Rights Act, which defines "wages" as follows:

> S.11.(6) . . . "wages" means any form of remuneration payable for work performed by an individual and includes salaries, commissions, vacation pay, dismissal wages, bonuses, reasonable value for board, rent, housing, lodging, payments in kind, employer contributions to pension funds or plans, long-term disability plans and all forms of health insurance plans and any other advantage received directly or indirectly from the individual's employer.

The first effect of this long list is discouraging. Given the multitude and variety of these benefits, how can we ever find out who gets what and how much it is worth, let alone whether women are getting their rightful share? As it turns out, such doubts underestimate the ingenuity of our information gatherers. In fact, Statistics Canada did collect and publish detailed information on the components of our labour costs for a number of years,[1] and some private firms also compile similar data.[2] Few people will be surprised to learn that none of these studies provide separate figures for each sex.

What are Canada's main fringe benefits, then, and how much do they cost? According to Table 7-1, by far the most important Canadian fringe benefit is "pay for time not worked." This category, which includes vacations, holidays, and other paid time off, accounted for 10 to 12 per cent of all employee compensation costs in the years surveyed by Statistics Canada (1978) and the private management consultant firm of Thorne Stevenson & Kellogg (1979/80).

The next most important fringe benefit is pension plans, including the Canada Pension Plan (CPP), the Quebec Pension Plan (QPP), and employer-sponsored pension plans. Together, they account for something between 4.4 and 5.5 per cent of total labour costs. All the other benefits are far behind, with other so-called "welfare" programs such as workers' compensation, unemployment insurance, and life/health insurance plans costing around 1 to 2 per cent each. At the bottom of the list are items such as bonuses (0.3 per cent), which presumably include hefty cash payments for the lucky ones and a free drink or two at the company's Christmas party for the less fortunate.

The other remarkable conclusion to be drawn from this table is that fringe benefits make up a very important part of total labour costs, amounting to 20 per cent of total compensation in the Statistics Canada survey and 29 per cent in the private survey. The large difference between these figures is explained by the following:

1) Statistics Canada questioned a large sample of employers having more than 20 employees, while the 172 employers in the Thorne Stevenson & Kellogg survey were almost all very large organizations.[3] As fringe benefits increase with the size of the employer,[4] it is understandable that the private study should give larger results.

2) The Thorne Stevenson & Kellogg sample included a disproportionately large number of employees with higher-than-average levels of unionization,[5] and union participation is closely correlated with the presence of fringe benefits.[6]

3) Statistics Canada's survey was done earlier, and all available data show that fringe benefits have been growing from year to year in relation to direct pay. The Thorne Stevenson report concluded that "employee benefits, which represented 15.10 per cent of the cost of gross annual payroll in 1953/54, have increased 119.14 per cent to 33.09 per cent of gross annual payroll (in 1979/80)."[7]

What does all this tell us about the women's share of fringe benefits? Nothing directly, but a great deal between the lines. Overall, it reveals that the typical recipient of generous fringe benefits works for a large organization in an industry where most employees are unionized. This general description fits approximately 55 per cent of Canada's male paid workers and 25 per cent of its female workers.[8]

In terms of equal pay, the obvious implication is that the real gap between men's and women's total wages may be substantially larger than all the studies comparing only direct pay have shown. Even more

Table 7-1

Components of Labour Costs, Canada, 1978 and 1979/80

	Labour costs			
	Statistics Canada, 1978		Thorne Stevenson & Kellogg, 1979/80	
	Per employee	Proportion of total compensation	Per employee	Proportion of total compensation
	(Dollars)	(Per cent)	(Dollars)	(Per cent)
Direct pay for time worked	13,185	80.0	15,059	71.4
Pay for time not worked				
Vacations	794	4.8	1,123	5.3
Holidays	596	3.6	680	3.2
Coffee breaks and rest periods	–[1]	–[1]	689	3.3
Bereavement, jury duty	–[1]	–[1]	24	0.1
Sick leave	170	1.0	116	0.5
Other time off	27	0.2		
Subtotal	1,577	9.6	2,632	12.5
Other cash benefits				
Bonuses	51	0.3	363[2]	1.7[2]
Severance pay	30	0.2	154[3]	0.7[3]
Miscellaneous	229	1.5	–[1]	–[1]
Gross payroll (total direct payments)	15,071	91.4	18,208	86.3
Noncash benefits				
Workers' compensation	186	1.1	234	1.1
CPP and QPP	161	1.0	196	0.9
Other pension plans	558	3.4	974	4.6
Unemployment insurance	209	1.3	208	1.0
Life/health insurance	262	1.6	1,043	4.9
Other "welfare"	33	0.2		
Other	–[1]	–[1]	221	1.0
Total compensation	16,481	100.0	21,084	100.0

1 Did not appear as a separate category in that survey.
2 Includes profit-sharing plans.
3 Includes savings plans.
SOURCE Statistics Canada, *Employee Compensation in Canada: All Industries*, Cat. 72-619P, 1978; Thorne Stevenson & Kellogg, *Employee Benefit Costs in Canada* (Toronto: 1982).

important, the fact that fringe benefits have grown at a much faster rate than direct pay means that the total wage position of women in relation to that of men has not remained more or less stable as is widely assumed,[9] but has instead been deteriorating from year to year over the last few decades.

A few people have suspected this for some time. In 1981, Gunderson and Reid wrote that:

> Fringe benefits . . . constitute approximately one-third of the total compensation package. In spite of this importance, the analysis of fringe benefits has not kept pace with their growing importance. . . . The problem is especially serious in making male-female comparisons because there are theoretical reasons to believe that their fringe benefits may differ more than their wages. This is especially the case after equal pay legislation since employers that are compelled to pay equal wages may try to adjust their non-wage components to restore their original total compensation position.[10]

The most obvious recommendation this calls for concerns the crying need for accurate and reasonably frequent data on the incidence and cost of the fringe benefits received by male and female earners in Canada. Until such information is available, no comprehensive assessment of the women's compensation position can take place and no serious enforcement of equal-pay laws can be done.

Once such data become available, we will be able to scrutinize each fringe benefit to find out whether women benefit less from it and, if so, by how much and why. The rest of this chapter will do such a brief analysis on the basis of the information that already exists.

Pay for Time Not Worked

As seen in Table 7-1, the most costly by far of our fringe benefits is the category entitled "pay for time not worked." This includes vacations (about 5 per cent of total labour costs), holidays (3 per cent), coffee breaks and rest periods (3 per cent), sick leave (1 per cent), and other time off for a multitude of reasons (less than 1 per cent).

Even in the absence of any sex-differentiated data on this, one can make a reasonable guess that men benefit more from these "time off" benefits on the basis of the following evidence:

1) The general practice is to allocate longer paid vacations to higher-status employees and employees with most seniority,[11] and both of these groups are disproportionately male.

2) Coffee breaks and rest periods also tend to be linked to status, with lowest-ranking employees such as women being more closely supervised.

3) Present sick leave data are inconclusive, showing more female absences lasting a short time and similar absences for women and men for longer illnesses.[12]

4) In 1982, less than two-thirds of part-time earners were entitled to prorated vacations and less than three-quarters were receiving prorated holiday benefits.[13] This was attributed to the fact that part-time employees, 70 per cent of whom are women, are not generally protected by labour laws.

The only obvious recommendation to come out of the above is that our labour laws should be changed to mandate prorated vacations and holidays (or pay in lieu of them) for all part-time employees. Other recommendations will have to wait for a more thorough analysis.

Pension Plans

Moving on to the next most important fringe benefit, which is pension plans, we find that the differences in impact of these plans on women and men are well known and amply documented. To understand these differences, it is necessary to have at least a cursory knowledge of the elements that make up the multilayered cake that is Canada's pension system today. They are:

1) At the bottom, the federal Old Age Security (OAS) program. Its two components, which are funded out of general revenues, are: (a) the OAS pension, which pays about $300 a month to all those aged 65 and over who meet the residence requirements; and (b) the Guaranteed Income Supplement (GIS), an income-tested benefit paid to those who have little or no income other than the OAS pension. (Some provinces also provide top-ups to the GIS.)

2) The CPP and QPP, which are financed through contributions made by all earners and their employers. These plans provide retirees and their surviving families with pensions calculated on the basis of the contributors' incomes. Maximum CPP or QPP retirement benefits amount to 25 per cent of average lifetime earnings up to a ceiling that is close to the average wage. Surviving spouses' benefits amount to 60 per cent of the retirement pension.

3) Employer-sponsored pension plans. These were set up by some employers to provide a supplementary retirement income to their former employees. Like CPP and QPP contributions, the sums paid into employer-sponsored pension funds are deductible for income tax purposes.

4) Private savings. Among others, these include deposits made in Registered Retirement Savings Plans (RRSPs), which are tax-deductible and cannot exceed 20 per cent of a person's earned income.

The respective positions of men and women under this pension system are substantially different. As Table 7-2 shows, today's average male retiree derives as much income from his employment-related pensions (33 per cent of his total income) as he does from the federal OAS/GIS benefits (34 per cent). By contrast, the typical female pensioner is much more dependent on the OAS/GIS benefits, with fully 47 per cent of her income coming from that source.

The main consequence of this difference is that elderly women's incomes are much lower than those of elderly men ($6,661 on average in 1980, compared with $9,227 for men). The much higher poverty rate for senior females that results from this discrepancy is greatly aggravated by the fact that while 71 per cent of male pensioners are married – and thus sharing expenses with their pensioner wives – more than 60 per cent of women aged 65 and over are widowed, single, or divorced.[14]

The questions this raises are: How much, if any, of these differences in women's and men's retirement incomes are due to discrimination? To what degree has the recent tremendous increase in women's labour force participation given them equal access to employment-related pensions? In the event that younger women still lack equal and adequate pension coverage, what can be done to improve the situation?

Table 7-2

Income of Old Age Security Recipients, by Source, Excluding Employment Income, Canada, 1980

	Male pensioners		Female pensioners	
	Proportion of total	Average amount	Proportion of total	Average amount
	(Per cent)	(Dollars)	(Per cent)	(Dollars)
Old age security pension and guaranteed income supplement	34	3,114	47	3,110
Employment-related pension plans	33		16	
CPP and QPP	15	1,396	9	604
Employer-sponsored pensions and annuities	18	1,661	7	442
Investments	25	2,307	29	1,915
Other	8	749	8	590
Total	100	9,227	100	6,661

SOURCE Health and Welfare Canada, *Survey of Old Age Security and Canada Pension Plan Retirement Benefit Recipients, July 1981 — Final Report* (Ottawa: 1983).

Discrimination by Reason of Sex

Outright discrimination by sex is not a significant factor in pension plans today. The only prominent feature in which it still appears is in the payment of larger pensions (called "life annuities" in that context) to men than to women for the same amount of money. The reasoning behind this practice is that women's pensions cost more because of their longer life expectancy.

The people affected by this practice are the 5 per cent or so of pension plan participants – about 225,000 people – who belong to "money purchase" types of plans.[15] (Employees under federal jurisdiction are not concerned because the Canadian Human Rights Act obliges employers to pay higher contributions for women in such cases to make up the difference. A similar provision is due to come into force in Manitoba on January 1, 1985.)[16] Another, much larger group to be affected includes the millions of Canadians of both sexes who will eventually use their RRSP deposits to purchase life annuities.

Following vigorous protests from women's groups, who pointed out the fallacy of using average mortality rates when in reality 80 per cent of male and female pensioners of the same age die in the same year, the payment of lower benefits to women has now been widely discredited. This was evidenced in the federal government's "Proposed Amendments to the Pension Benefits Act," tabled in the House of Commons in June 1984, which would forbid discrimination "on the basis that persons of one sex live or tend to live longer than persons of the other sex."[17] A recent position paper by the government of Ontario also recommended that "equal pensions be paid to men and women who retire from a pension plan under identical circumstances."[18]

Still, nothing has yet been done with respect to sex-based annuities purchased with RRSPs. The most satisfactory solution, which would require legislative action by all jurisdictions, would be to mandate the use of unisex mortality tables for all insurance and pension purposes. An interim solution would be immediate changes to the federal income tax legislation to prevent RRSP funds from being used to purchase annuities calculated on the basis of sex-differentiated mortality tables.

Discrimination by Reason of Family Status

Participation in the CPP or QPP is mandatory for all earners whose income in cash and/or in kind exceeds a certain level ($2,000 in 1984). The only exceptions to this universal coverage are listed in section 6(2) of the Canada Pension Plan Act, which states that:

> 6(2) Excepted employment is . . .
>
> (d) employment of a person by his spouse, unless the remuneration . . . may be deducted under the Income Tax Act. . . .
>
> (f) employment for which no cash remuneration is paid, where the person employed . . . is maintained by the employer.[19]

Since a salary paid to a spouse can only be deducted for tax purposes when it is remuneration for work done in a business or on a farm, the effect of these subsections is to exclude the work of homemakers from CPP and QPP coverage and to strengthen the myth that women who keep house for their families are not part of the "workforce." This was criticized by the Canada Pension Plan Advisory Committee in 1983.[20] The Committee pointed out that under common law, a wife's duty to provide her husband and children with domestic services entitled her *in exchange* to adequate food clothing, and shelter. As a result, the Committee concluded that:

> ... there is no doubt that such legal provisions established the wife's right to support as a direct *compensation* for her homemaking services. Indeed, the main difference between so-called "housewives" and live-in paid housekeepers, as far as compensation is concerned, is that the latter are obliged to declare the total value of their board and cash wages for tax and CPP purposes, while the former are not. Wives are in fact prevented from declaring their in-kind wages for pension purposes. . . . [Emphasis added.]
>
> Were it not for this provision (of the Canada Pension Plan Act), which is a flagrant case of discrimination by reason of family status, homemakers who are supported by their spouses would presumably be able to contribute to the CPP today on the basis of the value of their maintenance.[21]

This and similar reasonings are behind the longstanding demands of women's groups to change homemakers' status in the CPP and QPP from that of dependants entitled to surviving spouses' benefits to that of workers in their own right whose child care and domestic tasks should be valued and recognized for pension purposes. Their first victory was the introduction of the "child care drop-out" provision in the CPP and QPP. This works by excluding from the calculation of a person's average lifetime earnings, on which the pension is based (the CPP or QPP pension equals 25 per cent of that average), the years of low or zero earnings spent outside the labour market caring for a child or children aged less than seven. In the case of a career woman who spends most of her life working outside the home, this has the effect of providing her with fully subsidized CPP or QPP credits at her normal level of coverage during her childrearing period(s).

The next stage in the recognition of homemakers' work, which is presently the subject of numerous political discussions, is the extension of CPP and QPP coverage to other homemakers who cannot benefit from the "child care drop-out" provision. These are mainly long-term homemakers who will not or cannot return to the labour market on a full-time basis after their children have grown. The most popular proposals, which were endorsed by both the Canada Pension Plan Advisory Committee and the Parliamentary Task Force on Pension Reform in 1983, call for these women to be included in the CPP or QPP on the basis of hypothetical earnings equal to half the average wage, which is close to the cost of hiring a paid homemaker today.[22] Part-time earners/homemakers would be included on a proportional basis.

Some people have criticized these proposals because of their cost, saying that it would be unfair to force full-time earners (many of them wives who do housework at night and on weekends) to subsidize the CPP and QPP benefits of women who work mainly in their homes. This is based on a misunderstanding of the recommendations, which provide that with very few exceptions the full cost of these homemakers' CPP and QPP pensions would be paid by the adults who benefit most from their services, meaning their husbands in most cases. Furthermore, as most proposals to include homemakers in the CPP and QPP go hand in hand with calls to reduce and eventually abolish payments to surviving spouses, which are very expensive and are presently subsidized by all CPP and QPP participants, the overall result may be relatively lower CPP and QPP contributions than now for single-parent earners and two-earner families.

Other Differences in the Treatment of Women and Men in Pension Plans

There are many other differences between women and men in pension plans, but they are not due to single factors such as sex or family status. Instead, they are the direct consequence of women's precarious and inferior status in the paid labour market. Let us look at the problems women encounter with the CPP or QPP and employer-sponsored pension plans in the areas of coverage and level of benefits.

Coverage

As mentioned, the CPP and QPP purport to include practically everyone who earns an income in Canada. Such is not the case with other pension plans, which are entirely voluntary and set up at employers' will. This leads to considerable differences in coverage between women and men in employer-sponsored plans. In 1982, the last year for which these data are available, 54 per cent of male earners participated in them while only 36 per cent of female earners did.[23]

The main cause of this discrepancy is that the employers who are most likely to provide pension plans to their employees are the large ones that have highly organized, well-paid labour forces.[24] As we know, those are precisely the types of organizations where relatively few women are found. The one important exception to this rule is the public service, with the result that 56 per cent of all female members of employer-sponsored pension plans work for some level of government, compared with 36 per cent of all male participants.[25]

The other characteristic of women that affects their participation in employer-sponsored pension plans is the fact that they are more likely than men to hold part-time jobs. When part-time employees are excluded from the total, women's participation in these plans jumps from 36 to 47 per cent. When male part-timers are excluded, the participation rate of men only rises by 3 per cent.[26]

Level of Benefits

Even a few months of contributions to the CPP or QPP can entitle one to a pension, albeit a minuscule one, at the age of 65. CPP and QPP pension credits are also fully transferable, following employees from job to job without any difficulties. Also very important for the longer-lived sex, CPP and QPP pensions are fully indexed to compensate for increases in the cost of living.

In spite of all these qualities, though, the CPP and QPP have one major drawback: the pensions it provides to women are substantially lower than those it pays out to men. This cannot fail to occur because with a few exceptions – including the child care drop-out provision and a general 15 per cent drop-out clause for everyone – CPP and QPP entitlements are a perfect mirror image of people's earnings in the labour market.

Some people still point to widows' pensions as the saviour, the supplement that raises women's retirement income at the point when their husbands are no longer around to support them. What these optimists fail to realize is that surviving spouses' benefits are paid in reverse relation to need (the poorer the husband was, and therefore the smaller his savings, the lower the widow's pension). They are also extremely chancy now that 40 per cent of all marriages are expected to end in divorce.[27] When this happens, all entitlement to a survivor's pension disappears, whatever the length of the marriage and the former wife's needs.

In striking contrast to the CPP and QPP, the fact of having participated in an employer-sponsored pension plan in no way guarantees one any rights to a pension at retirement age. This is because employees usually must contribute to the plan for at least ten years to acquire such rights, and nowadays very few people work that long for the same organization. Those who leave before acquiring irrevocable rights are generally given back only their own contributions with a very low rate of interest. Those who do stay long enough to collect usually find out to their dismay that their benefits are not going to be increased regularly to keep up with rises in the consumer price index.

These conditions are obviously far from ideal for any group of employees, but are there reasons to believe that women are even more adversely affected than men? Yes, the main reason being that female employees have a higher rate of turnover and drop out of the labour force more often than their male counterparts.[28] As a result, the small proportion of female earners who are members of employer-sponsored plans (36 per cent) are exceedingly unlikely to ever collect decent pension benefits from that source. In fact, many of them would probably have been better off keeping the sums they contributed to the employers' plans and putting them in a bank. Indeed, according to Gunderson and Reid:

> People with high turnover can actually be worse off by being a member of a pension plan. This could be the case, for example, if the plan were not vested and women tended to leave the establishment without receiving any of the employer's contribution, and if they were not paid a compensating wage to cover this contingency. Under such circumstances, they could be disadvantaged by being in such a plan; that is, their current wages may be lower because they are receiving the expected benefits of a pension, but these expected benefits are unlikely to come to fruition because such women are unlikely to be with the establishment long enough to receive the pension benefits. . . .[29]

As all of this clearly indicates, even outside the problem of women's lower earnings, it is as certain as anything can ever be that female earners are not getting their fair share of the benefits that are dispensed by employer-sponsored pension plans. It is also obvious that it will be far from easy to obtain the necessary data to establish precisely to what degree women are disadvantaged compared with men in these programs.

Solutions to Women's Unequal Status in Employment Pension Plans

Having thus explored the extent of the problem, we will now turn to the proposals for change that have been made to provide women with equal and adequate pensions. To most students of the question and to most women's groups, the answers are obvious. Since the CPP and QPP are the only programs that give equal coverage to female earners and that can be adapted to cover the periods most women spend outside the labour market working for their families, what is needed is to increase the relative importance of the CPP and QPP in our pension system. Specifically, this means expanding the CPP and QPP so that they will replace a larger proportion of lifetime earnings than they do at the present time.[30] Most frequently cited is a replacement rate of 50 per cent instead of the current 25 per cent, but most of those who made these recommendations would happily settle for a rate closer to 40 per cent.

As of the summer of 1984, however, such proposals were finding no favour with our elected officials. On the contrary, most Canadian governments were supporting expensive tax-subsidized improvements to existing employer-sponsored pension plans along with huge increases in tax deductions to encourage upper-income people to make even larger deposits in retirement savings plans.

Specifically, the federal and Ontario[31] agendas called for the following.

In the CPP and QPP

– No change from the present replacement rate of 25 per cent of past earnings.

– Credit splitting between the spouses upon divorce and when the youngest spouse reaches the age of 65. This is in answer to the demands of women's groups who find it essential that the pension rights the spouses earned during their marriage be shared equally between them to recognize that marriage is an equal partnership. The problems with the proposals made in this regard are: (1) splitting would still not be mandatory upon divorce, with the result that exceedingly few ex-wives would benefit; (2) splitting is presented as an alternative to the direct inclusion of homemakers' work in the CPP and QPP rather than as a complement to it. This is most unsatisfactory because if a homemaking wife is not also given pension credits of her own, the only thing splitting will achieve is to divide the husband's CPP or QPP credits in half to produce two inadequate pensions.

– Increasing surviving spouses' pensions and continuing them after remarriage. As mentioned above, survivors' pensions are undesirable for the following reasons: (1) They are always based on a wrong assumption. Wives at home are not dependants of their husbands, but workers whose work is more valuable than the cost of their support. (2) Widows' pensions give little or nothing to the neediest and mainly benefit the homemaking wives of better-off men (if they are still married by the time the men die). (3) Surviving spouses' benefits are fully subsidized by all CPP and QPP participants, particularly by career-oriented women of all marital statuses because they are the group least likely to ever collect substantial survivors' pensions or to leave a surviving spouse.

– Lengthening the general drop-out period for all CPP and QPP participants. This would be good for women since their work patterns are more irregular and they could use more subsidized years outside the labour market.

In Employer-Sponsored Pension Plans

– Acquired rights to employers' contributions after two years (federal) or five years (Ontario) of participation.

– Guaranteed minimum interest on employee contributions.

– Portability rights for terminating employees.

– Where plans exist, coverage of all full-time and part-time employees aged 25 and over (federal) or 30 and over (Ontario).

– Partial escalation of benefits to offset inflation.

– Inclusion of employer-sponsored pension rights in the assets that are split between the spouses upon divorce.

– Mandatory joint and last-survivor pensions under which the employee's pension is reduced to pay the survivor a benefit. This could be renounced if both spouses agreed.

There is no question that these changes would greatly improve employer-sponsored pension plans. The drawbacks for women are:

– As women participate in these pensions to a much lesser degree than men, the gap between women's and men's fringe benefits would get even larger.

– The greater expenditures employers would have to make on their own pension plans to implement these changes would make the prospects of expanding the CPP and QPP even dimmer than they already are.

– These reforms are still partial only, especially with regard to inflation protection, which would remain very incomplete. In the circumstances, it is uncertain whether participation in employer plans would be advantageous to low-income employees. According to the 1979 Lazar report:

> [T]here is some recognition that lower paid employees would be better off not participating in a Registered Pension Plan. For employees with very low incomes, due either to low wages or marginal attachment to the labour force, or both, the benefits from the tax deductibility of RPP contributions are small or non-existent. Furthermore, the pension income that is ultimately received serves to reduce entitlement to public pension benefits which are income-tested. In those cases where incomes are so low that little or no tax saving results from membership in a plan during the pre-retirement period, and where subsequent RPP benefits serve to reduce benefits from public programs by an equivalent amount, it is clear that the participants are worse off for having been members of a Registered Pension Plan.[32]

In particular, this should lead us to be very careful and to do more research before coercing part-time earners into employer-sponsored pension plans. In their case, payment in lieu of this fringe benefit might be more advisable.

Unemployment Insurance

Next in line among fringe benefits is unemployment insurance, accounting for 1.3 per cent of all compensation costs in the Statistics Canada survey. The financing of the unemployment insurance (UI) program is done on a tripartite basis through contributions from employers, employees, and the federal government. Employee premiums equal a percentage of earnings up to a ceiling, while employers contribute 1.4 times as much. The risk insured by the UI program is temporary loss of income because of unemployment, sickness, or pregnancy, and benefits amount to 60 per cent of previous earnings up to a maximum of $255 a week in 1984.

As with the CPP and QPP, the difference between the benefits received by male and female claimants is not due to direct discrimination but to women's inferior position in the labour market. The result is that in 1980, average weekly UI benefits amounted to $90.80 for women and $122.50 for men. As for either sex being more likely to collect benefits, the unemployment rates of women and men have been quite similar in the last few years.[33]

The main recent incident of direct sex discrimination to have occurred under the Unemployment Insurance Act was the Stella Bliss case,[34] in which a woman was prevented from collecting regular UI benefits because of Section 46, which forbids the payment of regular or sickness benefits to a person in the weeks surrounding the birth of her child. Although the Supreme Court of Canada ruled against Stella Bliss on the grounds that the Act did not discriminate against women, but against pregnant people (!), she was eventually vindicated when Section 46 was repealed effective January 1, 1984.

Like the CPP, unemployment insurance discriminates by reason of marital status in its treatment of spouses. The Unemployment Insurance Act goes even further than the CPP, however, excluding from insurable employment: employment of a person by his spouse; and employment where the employee is a dependant of the employer [Sections 3(2)(c) and 3(2)(d) of the Act].

The effect of these subsections is to exclude from coverage not only homemakers, but all spouses who work for their husbands or wives on farms or in unincorporated family businesses. This is flagrantly discriminatory and should be repealed. As with the deduction of salaries paid to spouses under the Income Tax Act, appropriate measures could be adopted at the same time to protect the public against abuses.

Two other features of the UI program can be said to discriminate indirectly against women. They are:

1) As women drop out of the labour market more frequently than men, they are much more adversely affected by the UI provision that requires re-entrants to the labour force to hold a job for a longer period than other people to become eligible for benefits. As the rationale for this distinction is doubtful to start with (unlike new entrants, who never contributed to the UI program, re-entrants may have contributed for very long periods and have thus "paid their dues"), it should be repealed as soon as possible.

2) Employers are only obliged to contribute to the UI program for employees who work at least 15 hours a week or who earn at least 20 per cent of the earnings ceiling per week (i.e., $85). This means that part-time earners who do not meet these requirements, most of them women, are excluded from coverage. The Commission of Inquiry into Part-Time Work found this inequitable and recommended a system under which "all employed workers working over 8 hours a week would pay a straight percentage of their salary, up to a set . . . maximum. These workers should then be covered for UI benefits on a basis prorated according to the average number of hours they worked each month."[35]

Researcher Julie White, in her study of part-time work for the Canadian Advisory Council on the Status of Women, recommended the inclusion of all those who perform "100 hours of work within a 10-week period."[36] This would have the advantage of including more casual or irregular employees whose hours of work vary from week to week.

Conclusion

Many other fringe benefits exist and it is hoped that each one will be analysed before long to find out whether it gives more to women or men and to what degree. Fragmentary as it is, the information reviewed in this text has demonstrated that fringe benefits have played the role of secret joker in the equal-pay game. Until this crucial and still very obscure element is brought to light and properly evaluated, we can have no clear idea of whether women in the labour market are gaining ground, falling behind, or just staying afloat.

Comments by Christine A. Fagan

Any useful discussion of the policy aspects relating to fringe benefits and the female labour force must extend beyond governmental policy. Changes considered desirable in this area are also the responsibility of the business and labour sectors. The emphasis in Louise Dulude's presentation is on the issue of pensions, and it is undoubtedly an important problem for which resolutions must be found and implemented.

The very term "fringe benefits" is a misnomer as it suggests that these benefits are in some way gratuitous and subsidiary to wages. In actual fact, the benefits cannot be separated from the basic remuneration package, and they must be viewed as integral to job satisfaction.

The standard employee benefits include: paid time off (vacations, statutory holidays, coffee breaks, and so on); legislated benefits (CPP and QPP, unemployment insurance, and workers' compensation); private pension plans; "welfare" plans (mostly insured benefits such as group life and health and dental plans); and miscellaneous benefits (cafeteria subsidies, fitness programs, tuition assistance, and savings and bonus plans).

We propose to examine these employee benefits by separating the important issue of pensions from the other benefits, which will be discussed jointly.

Employee Benefits

The information presented by Ms. Dulude is drawn from Statistics Canada (1978) and a private study by the management consultant firm of Thorne Stevenson & Kellogg of Toronto (1979-80). There is available from the same management consultant firm similar information as it related to 1984 and indicating the developing trends regarding employee benefits.

– In the 1950s the costs of employee benefits averaged $515 for each employee. In 1984, the benefit costs averaged nearly $9,000 for each employee. In other words, employers were paying four times as much in constant 1971 dollars for such benefits as they did in the early 1950s.

– Benefits amounted to 33 per cent of total payroll costs in 1984.

– Paid time off was the costliest benefit, adding up to 14-15 per cent of gross payroll costs or about $4,100 for the average employee in 1984.

– The legally required benefits amounted to 4 per cent of the total payroll costs in 1984: employers paid an average of $500 per employee for unemployment insurance and an average of $600 per employee for worker's compensation programs and government pension plans.

– Private pension plans amounted to 4-5 per cent of payroll costs. A study within the last two years indicates that 94 per cent of companies surveyed offered pensions. Eighty per cent of those plans were contributory, with both the employer and employee putting money in; the remaining 20 per cent of plans were noncontributory, with the employer paying the full costs.

– Welfare plans (insured benefits such as group life, health, and dental plans) amounted to 5 per cent of the payroll in 1984. Fifty-five per cent of employers paid the full costs of provincial health care plans, and 42 per cent paid a portion.

– The miscellaneous category of employee benefits has changed with time and now includes not only bonus plans and cafeteria subsidies but also fitness programs, drug and alcohol counselling, and preretirement counselling. This is an area of expansion that is beneficial to both the employer and the employee.

The conclusions to be drawn from the above and other available information are that there has been definite progress in the expansion of the employees' remuneration package. The question left unanswered, however, is the extent of this progress as it relates to the general workforce. This is the question that Ms. Dulude concluded could not be answered given the lack of available statistical information.

We concur with Ms. Dulude's conclusions that the male population has benefited more from the growth of employee benefits by reason of occupational differences, but again this cannot be quantified without further statistical information. One could also conclude that the female population will benefit more in this area from the trend as noted above because of evolving patterns in occupational differences. However, the pace at which this will occur cannot be ascertained with any degree of reliability at this time.

It is therefore difficult to formulate policy recommendations in this general area. The only recommendation that can be suggested relates to collecting sufficient information to assess what, if any, problems do exist. Consequently, our general comments are as follows:

– There should be greater recognition in use of the entire remuneration package, including all employee benefits, in the assessment of relative positions of individuals or groups within the labour force.

– Statistics should be collected accounting for employee benefits and thus allowing for the assessment of the status quo in this area.

– When the situation can be properly assessed and disadvantaged individuals or groups are identified with respect to employee benefits, governments will have to be cautious in the use of their legislative and regulatory powers. The costs of such benefits to all parties must be carefully examined.

The unemployment insurance program constitutes a major study by itself, which is beyond the time and the resources available to this writer. We agree in principle with the three discriminatory areas set forth in Ms. Dulude's presentation. However, we would like to examine the total costs of these suggested proposals – particularly, the financial implications relating to the third identified problem area of part-time employees. Our general comments are as follows:

– Representations for changes to the unemployment insurance program must be made soon, given the federal government's declared commitment to effect changes in the near future.

– Recognition must be given to the fact that there is a finite amount of money available and creativity is called for in exploring the means to make the most efficient use of those monies for long-lasting benefits. The imbalance of government expenditures between programs such as unemployment insurance and programs for the development of industries and jobs is a concern that must be tackled.

– The serious problem of youth unemployment, although not directly related to the unemployment insurance issue, must be responsibly approached by all groups in our Canadian society.

– Government, business, and labour should make better use of employment and financial counselling services to alleviate the unemployment problem.

Pensions

One area in which there is no lack of information available is that relating to pensions. Our limited examination indicates it is also an area in which there are no real disputes regarding the existing problems or the "ideal" solutions. Policies must focus upon a methodology for achieving equitable solutions that are within our means. There are no instant solutions, and improvements will be incremental. Similarly, there is unlikely any ideal solution, as the area is so complex, with so many human variables, that no program will fit everyone's needs. The two main areas to be examined are government pension plans and private pension plans.

Government Pension Plans – The financial aspects and funding of the CPP cannot be ignored. For instance, the Actuarial Report No. 8, released this year, indicated that the CPP fund at the end of 1982 was approximately $25.7 billion. By 1985, contributions paid in will be less than the benefits and expenses paid out. If the contribution rate is not increased, the CPP fund will have reached a maximum by 1982 and be exhausted by 2004. Obviously, questions must be raised regarding future funding, as this relates to the extent of coverage and the indexation issue. Our comments regarding other current issues of discussion:

– Pension rights are in essence personal property, and laws should better reflect this, particularly as it relates to spouses. We agree in principle with the splitting of pension credits, but the question is how this is to be done. Several approaches have been presented to the government such as splitting the credits when the youngest of the spouses reaches 65 years of age or, alternatively, a continuous splitting of the pension credits.

– There appears to be unanimous agreement that survivor benefits are inadequate. We note also recommendations that survivor benefits remain upon remarriage.

– Many are in agreement with the recommendation made by the Frith Report regarding homemakers' pensions. Resulting concerns following a brief examination of this issue relate to the costs of same as well as disproportionate advantages among various groups within our Canadian community.

– The first issue that must be addressed is the plight of the elderly poor. All programs will have to be examined – that is, the CPP and QPP, the GIS, and the OAS. It may be that certain payments-in-kind would be appropriate.

Private Pension Plans – Attention to the development of private pension plans is crucial if the present gap in pension coverage is to be rectified. The emphasis should be for working women to have full access to employer-sponsored pension plans. The problem relates, of course, to all Canadians regardless of sex, as 4.5 million Canadians work for small employers (employers with less than 100 employees). There appears to be a general consensus that there must be improvements made in the portability, vesting privileges, survivor payments, and indexation of private pension plans. Such changes, however, will most definitely increase the costs of these plans to both employers and employees. The life insurance industry should be given greater encouragement and support to develop such plans. For instance, the industry, through the Canadian Life and Health Insurance Association Inc., introduced a uniform pension plan about two years ago known as Uniform Pension Plan Services Inc. It is a practical plan for small employers, as the insurance company attends to all government reporting functions. More than 70 per cent of the employers belonging to this plan have fewer than five employees in the plan; 17 per cent have one employee enrolled. Some of the features of the plan are as follows:

- Employer contributions are immediately vested in the employee.
- Contributions may be transferred to an RRSP or to another pension plan when the employee terminates employment, but they cannot be withdrawn in cash.
- A central registry of plan members provides portability.
- The pension will be indexed unless the employee prefers a higher fixed pension.
- Two-thirds of the pension income continues to a surviving spouse unless spouses jointly choose some other form of pension.
- Employees are eligible to join the plan after one year of service with their current employer.

Consequently, plans do presently exist to remedy the defects identified regarding private pension plans, and the challenge now is to increase the general availability of such programs. The first hurdles to be overcome relate to basic education:

- The business and labour communities must be educated regarding the availability and need for acceptable pension programs.
- There is a general lack of knowledge and understanding on the part of the public regarding pension plans. Younger employees in particular should be knowledgeable regarding pension plans so that proper financial planning can be done early in their careers.

Floor Discussion

The discussion of fringe benefits centered primarily on the question of pensions. One participant outlined the probable direction of policy in this area. In her view, it will entail greater support for private pension plans – through expansion of plans like the RRSP or through the development of "money purchase" plans, a form of portable pension enabling employees to transfer pension credits from one job to another. Both these potential developments, the participant observed, could have a disastrous impact on women, who are rarely able to take advantage of these plans. Reform of public pension plans becomes even more urgent in consequence, she said.

Ms. Fagan noted that the growth of any sort of private pension plan in small business could benefit all the women employed in that sector. Ms. Dulude disagreed, concurring with the viewpoint that these plans could harm women and, further, could hinder the improvement of public plans.

Another question of interest to participants was the notion of pensions for homemakers. One participant commented that the rapid movement of women into the labour force might render obsolete this form of assistance. Ms. Dulude agreed with this observation, noting that proponents of pensions for homemakers have precisely that goal in mind. Proposed as a replacement for the widow's pension with its built-in assumption of dependency, the homemakers plan would continue paying benefits only as long as the need existed, she said.

On the same subject, another participant questioned the value of developing a pension program within such narrowly defined limits. The concept of a pension plan purely for wives excludes large numbers of needy women, she argued. She mentioned two proposals designed to encompass a much wider group: one providing all low-income people with a pension based on approximately 80 per cent of the average industrial wage; and another providing a tax credit through the CPP or QPP, again in relation to the average industrial wage.

Ms. Dulude replied that for purposes of the pension proposal the definition of homemaker included all heads of single-parent families. She added that the two alternative suggestions put forward by the participant were unlikely to be implemented by governments and, so, were unrealistic.

Another participant raised the issue of pension funding. Observing that payments from the CPP and QPP will soon exceed contributions, she queried how and by whom these anticipated liabilities will be funded – particularly given that loans granted earlier to provinces from excess pension funds are not easily recoverable.

Ms. Dulude noted that negotiations are presently under way concerning when and how to raise the level of contributions to the CPP and QPP. She agreed that the future cost of pension plans presents difficulties. But, she said, since those costs will have to be paid whatever the circumstances, the key question is whether payments should provide benefits only to a few or to everyone.

Questions and comments were also made on other aspects of the fringe benefit issue. One participant conjectured that women are benefiting more from fringe benefits now than in the past because of the narrowing of the gap between male and female wages over the decade.

Another participant mentioned the positive role played by unions in achieving fringe benefits, confirmed by her research on a sample of low-wage firms in the Maritimes. Another queried whether employees might prefer to be given a cash rebate instead of the fringe benefits offered by various companies. Still another argued that differences in fringe benefits between men and women should be analysed in relation to their particular income levels rather than in general terms.

8 Technological Change: Bad or Good?

Presentation by Stephen G. Peitchinis

In the past 25 years women entered the labour market in very large numbers. Now, with the advent of computers, word processors, printers, telecommunications instruments and processes, and the prospect of integration of all these into automated interacting systems, there prevails a widespread belief that their employment is being threatened. The threat has been given a sense of reality and imminence by the prolonged period of limited economic growth and increasing rates of involuntary unemployment, notwithstanding the fact that the employment of women increased every year in the past 25 years except one and increased in virtually all occupations that are deemed threatened by microelectronic technology. Perhaps the perceived threat derives not so much from the reality of the technology as from the disadvantaged role of women in the labour market and the expectation that when all jobs are threatened, their jobs are likely the first to go. The purpose of this chapter is to explore the extent of the threat and the nature of accommodations that might be necessary to minimize or neutralize the potential adverse effects on the employment of women.

The possibility of a paper on the implications of microelectronic technology for the employment of women originated with my presentation to the Federal Task Force on Microelectronics and Employment in July 1982. In the discussions that followed my presentation, most questions related specifically to the implications for women, whereas most of my answers related to the implications for the employment of human resources. I made no effort to distinguish between men and women, on the general premise that for most work activities men and women are perfect substitutes, and on the premise that the identification and classification of jobs as "women's jobs" and "men's jobs" is social, not functional.[1] But, upon reflection I concluded that there is merit to questions focusing specifically on the implications for the employment of women, because most women, unlike most men, are employed in activities that are deemed to be at greater risk.

In 1981, about 87 per cent of women were employed in service activities: 5.6 per cent in managerial and administrative; 1.2 per cent in natural sciences, engineering, and mathematics; 2.1 per cent in social sciences and related activities; 6.4 per cent in teaching; 9.0 per cent in activities related to medicine and health; 1.4 per cent in artistic, literary, and recreational work activities; 36.7 per cent in clerical and related office occupations; 9.4 per cent in sales activities; and 15.2 per cent in activities related to personal services, lodging services, food and beverage services, and such other.[2] Many of the activities involve substantially the handling of information – formatting, storage, and transmission – which is expected to be affected significantly by the introduction of microelectronic technology and particularly by the integration of computers and telecommunications technologies.

This chapter is organized in the following way: an outline of the characteristics of microelectronic technology is followed by a brief discussion of the potential effects of microelectronic technology on the organization of work and the labour market. This discussion is then followed by a discussion of the general effects of technological change on employment, the presentation of statistical evidence on the employment of women, questions and discussions of perceived threats to the employment of women, and the response of women to the perceived threats.

Characteristics of Microelectronic Technologies

Microelectronic technologies are highly pervasive, facilitating an enormous range of applications in virtually every conceivable process-activity. In addition, the convergence of microelectronic and telecommunications technologies facilitates the extension and expansion of process-activities from the local and specific to the global and diverse. This technical and scientific capacity for interactive transmissions of information will ultimately have greater implications for employment than the introduction of microelectronic technologies into individual instruments and processes.

Since a substantial majority of women are employed in information-related activities, it may be well that we focus briefly on the information-related characteristics of the technology. The technology has the technical and scientific capacity to perform the following information-related activities: (1) gather, collect, monitor, detect, and recognize information – the *capacity to capture information*; (2) convert information to digital form and retain the information in memory to be retrieved whenever required – the *capacity to store information*; (3) arrange and rearrange information, perform calculations, and produce configurations – the *capacity to manipulate information*; (4) transmit, display, and move information electronically – the *capacity to distribute information*; (5) provide information feedback in operating processes, which facilitates operational control of equipment and processes – the *capacity to control operations*.[3]

Most of these activities have been highly labour-intensive heretofore, and their performance has involved the employment of increasing proportions of the female labour force. Microelectronic instruments, processes, and products are reducing the labour intensity of such activities, and indications are that the reduction will continue as: (1) stand-alone instruments and processes within enterprises become linked together into telematic[4] systems; (2) the systems of different enterprises become linked together into telematic networks; and (3) the software for routine work activities become standardized and the software for complex operations improve in capacity and reliability.

Implications for the Labour Market and the Organization of Work

The characteristics of microelectronic technology outlined above have important implications for the labour market and the organization of work. To the extent that information is a critical element in labour market efficiency, computers and telecommunications technologies have the capacity to provide the technological and organizational infrastructure for continuous dissemination of up-to-date information on various aspects of the labour market. Included here would be information on the nature and characteristics of available jobs and their locations, the nature and characteristics of workers and their locations, terms and conditions of work, reservation prices of workers available for work, the range of prevailing wages and salaries in individual markets, the characteristics of individual communities in which employment opportunities exist, costs and other variables involved in relocation, and whatever other information may be deemed relevant in the decision-making process.[5] Such information can make a very significant contribution to the reduction of frictional unemployment and to efficiency in the allocation and utilization of human resources.

Similarly, to the extent that links and relationships between employment processes and manpower training institutions are imperfect, computers have the capacity to design instruments and processes and, following that, to design the training programs appropriate for the efficient use of the instruments. In other words, the technology provides for computer-aided design (CAD) of instruments and processes, computer-aided design of teaching programs, and computer-aided learning (CAL). Thus, the potential exists for the elimination or reduction of lags between changes in technology and changes in the skill composition of the labour force and the elimination thereby of structural imbalances in the labour market.

The effective utilization of such systems will provide significant benefits to women who take temporary leaves for maternity and other purposes and to those who return to the labour market after prolonged disassociation. The first group will be able to remain linked with the work activity to whatever extent necessary to remain up-to-date in their work knowledge; the second group will be able to determine from home the state of the labour market, search the job banks for desirable employment through a home terminal, and acquire the necessary job-related knowledge at home with the aid of individualized computer learning programs. In essence, the technology has the potential to provide a permanent and continuous link between the household economy and the market economy.

It should be noted, however, that the effects and outcomes to which reference is made here relate to the scientific and technical *capacity* and *potential* of the technology. The extent to which that capacity and potential will be realized will depend largely on political decisions. For example, the information that is required for the functioning of an efficient labour market involves employers, employees, labour organizations, communities and institutions involved in manpower preparation. Computers and telecommunications instruments, processes, and products have the scientific and technical capacity to receive, store, analyse, and disseminate the information on request. However, the information that will be processed will be that information only that is made available to the system. If the system is to be utilized efficiently and if the market potential is to be attained effectively, then policy decisions would have to be taken that would provide for the automatic entry of the relevant information into the system at some point in the market process – the moment that a job is created, the moment that a vacancy arises, the moment that a worker enters or contemplates entry into the labour market, the moment a worker decides to change jobs, the moment a skill becomes redundant and the need for a new one emerges. The potential of the technology will remain unutilized as long as the relevant information remains personal, corporate, institutional, and scattered in the market.

In relation to the organization of work, the convergence of computer and telecommunications technologies will facilitate two very significant possibilities: flexibility in work time associated with participation in work activity; and the conduct of work activity from wherever one will have access to the employment-related computer. The opportunity to access the employment-related work at will creates the possibility that work will become continuous, in the sense of not ending at the end of what has come to be "a day's work." Given such an expansion in the scope of work activity, it will become increasingly difficult to continue with the existing rigidities in work time, hours of work, and place of work. This suggests that computers and telecommunications technologies contain the technical and scientific potential to usher a new organization of work, characterized by flexibility in relation to when people work, the number of hours they work in any given day, and where they perform the activities that are expected of them. One observer of the emerging trends concluded that the technology "will produce an increasing overlapping between the two temporal cycles of everyday life – work and outside work."[6]

There is evidence of increasing work activity at homes and from homes with the advent of the personal computer, which undoubtedly will increase further as prices of personal computers decrease further, and as these become increasingly linked to information centers and to employment-related computers.[7] To accommodate the preferences of people who do not wish to work from home, yet wish to remain close to home, consideration is being given to the establishment of neighbourhood telematic centres.[8] But, it is not possible to pronounce with certainty at this time on the dominant form of work organization that will emerge. Although the scientific and technical capacity of the technology suggests dispersed forms of work organization, vested interests, management preferences, and worker preferences will influence the ultimate outcome.

The General Effects of Technological Change

A retrospective examination of the effects of technological changes will establish that they destroyed products, instruments, and production processes and created products, instruments, and production processes; rendered knowledge redundant and added to knowledge; destroyed work skills and created work skills; reduced employment in individual processes, industries, and sectors and contributed to the increase of employment in other processes, industries, and sectors; and have caused changes in both the organization of work and the organization of enterprises. Economic historian Dillard characterized the changes as interdependent, cumulative, and irreversible; whereas Schumpeter characterized them simply as destructive creations.[9] Therefore, in the consideration of the effects of microelectronic technology the question is not whether it will destroy knowledge, skills, and employment: it will; and it is not whether it will create knowledge, skills, and employment: it will. The question is rather at what rate and to what extent in each instance. We know, for example, that in the decade of the 1970s about four jobs were created for every job that was destroyed. But, we do not know how many of those whose jobs were destroyed were among those who occupied the new jobs. Disequilibrium in the Schumpeterian system is manifested in differences in the rates of destruction and creation of skills and employment. The task of public policy is to have in place programs and mechanisms that will accommodate the process of creation and replace redundant knowledge with new knowledge, and redundant skills with skills in demand, with the shortest possible lag. Public policy in Canada has failed in this respect.[10] There appears to have existed an implicit reliance on immigration to accommodate short-term deficiencies in specialized manpower and, in the long run, on retirements, involuntary withdrawals from the labour market, and the general increase in employment to correct imbalances of redundant skills.

Employment on the aggregate has increased almost continuously in the past three decades, notwithstanding the very significant changes in technology, the very notable changes in the structure of the economy and of production processes, and the very substantial rate of increase in the labour force through immigration and the increase in participation rates of women. Rather than bear down on employment, the changes have contributed to the increase in employment: the technological changes displaced the production frontier outward,[11] whereas immigration and the increase in participation rates of women facilitated and stimulated the growth process. This manifests an important relationship between technological change and employment: it means that at the micro level – that is, at the level of the production process – technological changes have structural implications and cause structural changes in employment; at the macro level – that is, at the level of the economy at large – technological changes affect employment generally. At the micro level, the effects are both positive and negative: employment-creating and employment-destroying; at the macro level they are only positive: employment-creating.

It should be noted that the capital intensity of production processes generally increased significantly over the period, increasing proportions of the capital in the form of computers and computer-related production instruments and processes. The structure of the economy changed significantly, and concomitantly notable changes were recorded in the occupational structure of the labour force and in the distribution of employment among sectors and among industries and activities within sectors. Some traditional, long-standing occupations suffered absolute decreases in employment; some suffered relative decreases; and some continued to experience significant increases. The new forms of capital instruments, processes, and products generated new occupations in numbers that more than offset the absolute decreases in employment of old occupations. The net balance, on the aggregate, has been expanding employment.

There is a general tendency to regard the structure of the economy as stable and optimal, and to view actual and potential changes as disruptive to the equilibrium. Such is not the case, of course. The structure is more akin to the structure of the population, which is characterized by a stock of growing and aging industries, and a continuous and quite substantial flow of births and deaths.[12] To emphasize the actual and potential deaths, as some have done in relation to occupations, without reference to births, is to distort reality. Reality, on the aggregate, is considerably different from the "logic" underlying extrapolations from single developments, even when those developments, like the advent of microelectronic technology, have pervasive characteristics.

In the consideration of the relationship between technological change and employment, there is a general tendency to seek direct relationships between employment and the emerging technology and to identify future employment activities with the technological instruments and processes. In reality, no technology, however widespread its application, has been a major source of direct employment specific to the production, operation, and maintenance of the technology. The same can be said with certainty about microelectronic technology: the total number of jobs that will be created in design, production, operation, and maintenance of microelectronic instruments, products, and processes will be very small relative to total employment in the economy and society at large. The most significant relationship between technology and employment is indirect – through the increase in productivity, decrease in costs, increase in incomes, increase in demand, and the expansion in general economic and social activity that is thereby generated.

Nevertheless, in view of the increasing agitation about alleged negative effects of computers and computer-related instruments and processes on certain occupations, it may be desirable to examine briefly some of the major changes in the employment of women over time.

The Employment of Women

The number of women in the Canadian labour force quadrupled between 1953 and 1982, while the number of men increased by 66 per cent. The phenomenal increase in the number of women was largely the result of the increase in participation rates, which raised the proportion of women aged 15 years and over in the labour force from 22 per cent in 1953 to 41 per cent in 1982.

All variables that account for the increase in participation rates of woman in the past three decades continue in effect, and some of them, such as postponement of marriage, postponement and control over the bearing of children, more education, and the acquisition of educational qualifications in demand in the marketplace, suggest continuation in the increase. Furthermore, there was evidence of a significant increase in participation by women in professional and managerial occupations during the decade of the 1970s, which for the most part are lifetime career employments, and employment opportunities created by microelectronic technology appear increasingly to favour women, notwithstanding the dominance of men at present as programmers, analysts, and such other computer-related occupations. The outcome of these developments will be a continuation in the increase of participation rates, which will raise the proportion of women in the labour force to equal, and perhaps even exceed, that of men by the end of the 1990s.

An examination of the *employment* record of women in Canada will establish three significant developments.[13] One is that employment has increased continuously over the past 40 years. In only one year, 1982, did employment actually decrease. It is most significant that half of that period is coincidental with the increasing utilization of microelectronic instruments and processes. The second development, to which reference was made above in relation to the female/male composition of the labour force, is that women have constituted an increasing proportion of total employment over time – from 28.5 per cent in 1962 to 41.2 per cent in 1982. The third development is that in most years over the past two decades more than half of the annual increase in total employment was accounted for by increases in the employment of women.

The Perceptions of Threat to Employment

We have noted that the employment of women in Canada has increased without interruption in every year except one in the past 40 years; and we have noted also that over the past 20 years the increase in employment has been coincidental with the widespread introduction of computers, word processors, and other instruments, processes, and products in work activities predominantly performed by women. Yet, the expectation of negative employment effects has not abated.

During the 1971-81 period, women experienced decreases in employment in 10 occupations: office machine operators, supervisors in lodging and other accommodation, personal service occupations, tailors and dressmakers, pressing occupations, elevator operating occupations, tobacco processing occupations, machine tool operating occupations, machinist and machine tool set-up occupations, and farm workers. It is probable that employment of filing clerks, recording clerks, and such other occupations had also fallen, but it was more than offset by increases in employment of data control clerks, computer operators, scheduling clerks, data entry clerks, data control clerks, and such other. Similarly, the decrease in employment of office machine operators was offset almost eight to one by the increase in employment of electronic data processing equipment operators. These are structural changes – a manifestation of Schumpeter's characterization of technological change as the process of destructive creation. The implication for employment policy is occupational adjustment to accommodate changing processes. In view of this record, why the continuing expectations of negative employment effects?

Arguments supporting negative employment expectations are founded on six conceptions: the *scientific and technical potential* of microelectronic instruments, processes, and products; the *rate* of technological change; the *appropriateness* of the technology for work activities in which relatively large numbers of women are employed; the *lump of labour* theory; the common *tendency to extrapolate* from the micro to the macro; and the *perception of the occupational structure as pyramid-shaped.*

In relation to the first, attention is focused on two characteristics of microelectronic technologies that have been absent from prior technologies. One is the "intelligent" functions of the technology, which compete directly with the most specific attributes of the human factor; the other is the pervasive nature of the technology. Unlike past technologies that for the most part complemented and substituted *physical* human activity, microelectronic technology has the scientific capacity to complement and substitute *mental* activity as well. There would not be much concern if mental activity were only complemented, since the effect would be expansive; the substitution of mental activity is a source of concern. An examination of applications to date will establish that substitutions of mental activity have been largely limited to the substitution of mental drudgery – using the brain to store all sorts of information, using it to retrieve stored information, and putting it to work in the manipulation of data. Such activities cannot be said to be creative in themselves. The taking over of such mental activities by computers should facilitate the allocation of human mental activity to higher-level functions. To the extent that such has been the outcome, the effect has been complementary to mental activity and expansive, not substituting and contractive. Changes in the functional activities of accountants and engineers, for example, over the past two decades will attest to this development. Nevertheless, the issue is not closed. The implications of artificial intelligence remain to be determined.

The pervasive nature of the technology is manifested in the technical and scientific potential for widespread application to instruments, processes, and products, and for the linkage of instruments and processes throughout the economy and society into telematic systems. "No technology in history," writes Colin Norman, "has such a broad range of potential applications."[14] Scientific and technical *potential* does not, of course, translate entirely into application, and often the rate of application is considerably slower than the potential for application tends to suggest.

The second source of concern is the *rate* of technological change and the capacity of people to accommodate it. There is apprehension that the rate may be too rapid for effective accommodating adjustments in occupational qualifications. The rapid increase in supply of microelectronic instruments, processes, and products over the past 20 years, the decrease in their prices, and the evidence of significant potential increases in productivity created a general expectation that the rate of implementation will accelerate any time.[15] Given a rapid rate of change, the rate of job destruction may exceed the rate of job creation; those whose skills are destroyed may not be able to acquire new skills; and those whose employment is terminated, as well as new entrants into the labour market, may find limited employment opportunities within a technological infrastructure capable of meeting increasing increments in demand for goods and services without incremental human intervention.

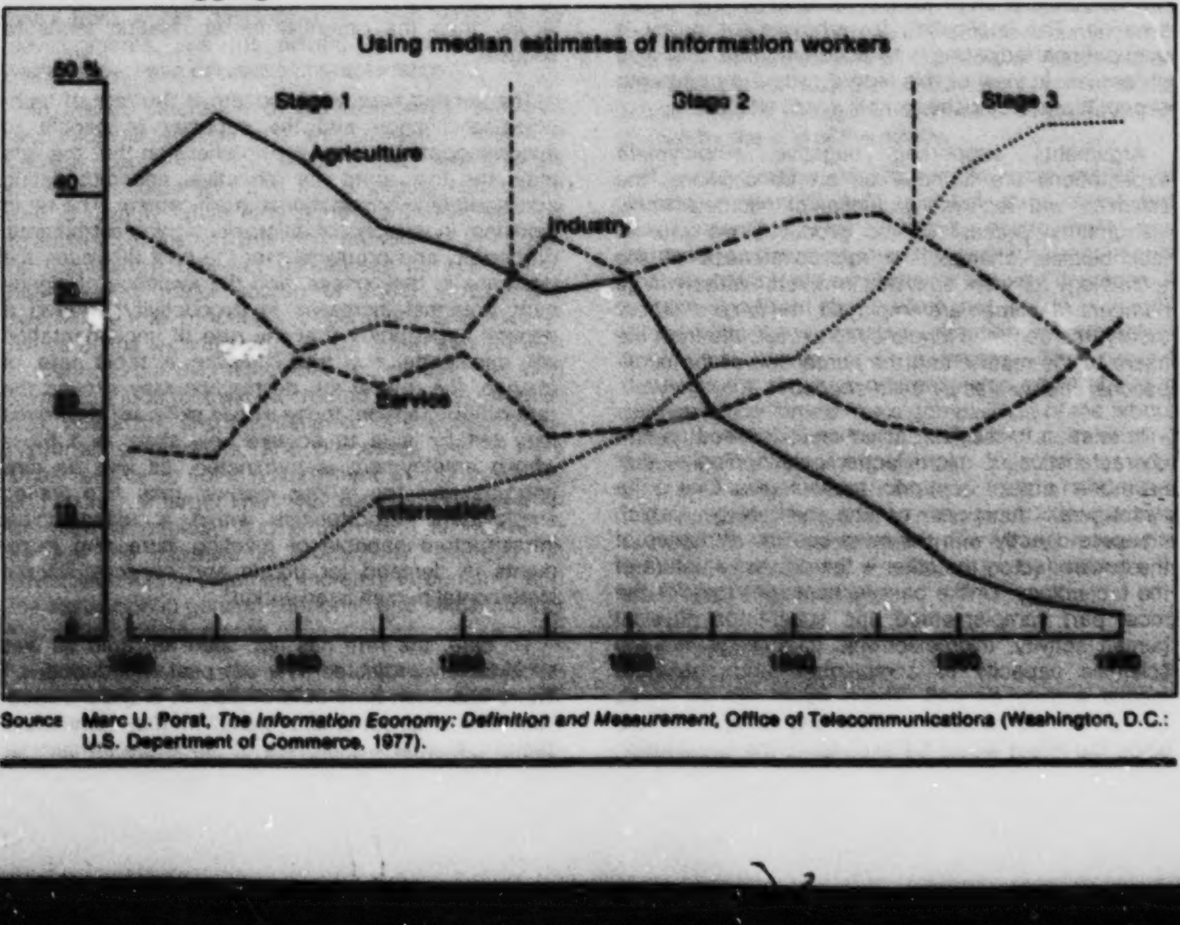
To date, the rate has not been as rapid as was successively projected over the past two decades.[16] There has been a notable slowdown in the introduction of microelectronic systems in the commercial sector generally – the office of the future remains as far in the future as it was five years ago, and computer-aided design/computer-aided manufacturing systems are as remote from operational reality as they were at the time of their "imminent" introduction 10 years ago. But, it is generally recognized that the slowdown is temporary, related to the general slowdown in the economy in the late 1970s and early 1980s. Public policy-makers should recognize this as a welcome opportunity to plan accommodating programs for the time when the rate comes to reflect once again the technology stimulus, uninhibited by scarcity of investment capital.

The third source of concern relates to the fact that microelectronic technology is appropriate for scores of activities that currently provide employment to almost 80 per cent of the labour force – half of them in offices and the remainder in retail and wholesale trade, education and health, transportation and communication, all vulnerable in whole or in part because of their occupational functions. Almost 90 per cent of the increase in Canada's labour force in the past 30 years became employed in the service sector. In recent years, the entire increase in the female labour force was accommodated in that sector. In the context of this massive employment creation in the sector, during a period of very significant increases in the participation rates of women, it is quite understandable that there should be apprehension about the possibility that increases in the capital intensity of production processes in the sector will reduce employment creation.

The apprehension is heightened when reference is made to past technological and structural changes and the accommodating adjustments in employment. When increasing capital intensity in goods-producing processes reduced progressively the labour-absorption capacity of the goods sector, the service sector came to the rescue. Not only did it absorb most of the rapidly increasing labour force, but it also accommodated a substantial outflow from the goods sector. What is the possibility now of a fourth sector emerging to do what the third sector did in the past 30 years? Porat suggests the information sector will perform that function (see Chart 8-1).

Chart 8-1

Four-Sector Aggregation of the U.S. Workforce, 1860-1960



Source Marc U. Porat, *The Information Economy: Definition and Measurement*, Office of Telecommunications (Washington, D.C.: U.S. Department of Commerce, 1977).

Porat, and Machlup[17] before him, asserts that increasing proportions of the national output will emanate from information work, and increasing proportions of the labour force will become involved in work activities related to the production, processing, and distribution-of-knowledge work. The implication of such a shift in employment from goods and services to information for the employment of women should be positive.

The dominant characteristics of information are *perishability* and *privacy*, both of which make employment continuous and expansive. A very substantial proportion of information that is produced by information workers, like the information provided in newspapers, magazines, radio, television, theatrical productions, live concerts, and such other, cannot be reused. Yesterday's radio and television schedule, like yesterday's weather forecast, is only of historical interest today. Because it is perishable, it must be produced continuously.

Continuous production is also dictated by the fact that much information is produced for private purposes. Although much is shared, much more is private. Large numbers of people are engaged in the search, production, analysis, and use of information for specific private and public purposes. Their information is not available for exchange. The secrecy, confidentiality, and intellectual property right to information result in very extensive duplications in information activities and in the output of information. The outcome of all this has been very substantial employment creation in the information economy.

Furthermore, many service activities are employment-expansive: unlike assembly-line employments, where the work functions are product- and process-specific, narrow and fixed, the work functions performed by many individual workers in offices, sales, and services are wide-ranging.[18] Such employment is less vulnerable to technology. A typist is highly vulnerable, for example, because the work functions are process-specific (related to the typewriter) and narrow (typing). Any technology that will remove the typewriter will eliminate the typing occupation, just as recording technologies eliminated the work functions of shorthand specialists. The same will apply to filing clerks, stock clerks, checkers, inspectors, sorters, mail delivery workers, meter readers, watchmen, draftsmen, welders, repair mechanics and machinists, assemblers and operatives, bookkeepers, printers, cashiers, tellers, compositors, and all other occupations and employment where work functions are relatively fixed, narrow in scope, and specific to a physical production process.[19]

Contrast the fixed, process-specific, and relatively narrow range of work functions of typists, cashiers, and bank tellers with those of secretaries. The average secretary performs a wide range of functions – research, administration, communication, liaison, public relations, and oftentimes is called upon to act as counsellor, therapist, confidante, and personal assistant. The range of functions is as expansive as the employer wishes to make it. The limit is the ability and willingness to pay; there is no fixed requirement of functions dictated by the nature and organization of the production process. A 1981 survey by the Office Management System Corporation found that clerk-typists in the United States spent, on average, only 15 per cent of their work time on typing activities. The remainder of their work time was allocated to administration (27 per cent), the telephone (8 per cent), maintenance (5 per cent), filing (4 per cent), and other general office activities; 19 per cent of the work time was spent "away from the desk," allocated to undefined activities, 13 per cent was accounted for by absences, and 8 per cent was spent "doing nothing."[20] Such wide-ranging activities cannot be easily automated, unless the organization of work is changed in ways that will narrow the range of work functions considerably, in the manner of many assembly-line jobs. But, there is no evidence of such reorganization taking place, notwithstanding the changes in office technology. Similarly, there are many occupations that have the capacity to generate work functions: again the limit is the willingness and ability of buyers to pay for the services. A human resources consultant will perform work functions that relate to the hiring of people (severance pay arrangements, transferability, retraining), the organization of work, motivation, grievance procedures, discipline – the range is unending. Accountants have demonstrated the expansive nature of their work in response to the challenge of computers. All expectations, including the initial expectations of their professional organizations, that the computerization of accounting and financial processes would impact negatively on their employment have proven wrong. The profession simply shifted the major part of its work from the manual and routine to the analytical – from the computation of data to financial analysis. In the process, it expanded its work functions by more than the functions that were taken over by computers, and instead of the expected surpluses of accountants it created shortages. Lawyers have done the same; doctors have been offsetting the productivity increases of technology for decades; engineers have always managed to create work for themselves, notwithstanding the fact that most of their time-consuming calculations have been transferred to computers; and public servants at all levels have been the masters of work creation throughout history.

The common characteristic of these occupations that makes their employment expensive is their capacity to detect problems and to even create problems, which then require solutions. In the process not only do they generate demand for their own services, but also for the services of a multitude of occupations related to them in work and involved with them in the production processes. Think of doctors and all others involved with them in the rendering of health services; of lawyers in the rendering of legal services; of governments with their seemingly unlimited capacity to create problems; and many others. The scope for work activity is without limit. The only constraint in converting the potential work activities into paid work, which by definition is employment, is the ability and willingness to pay for it.

The fourth major source of concern is founded on the premise that the volume of goods and services to be produced is relatively fixed, and the amount of work to be done in the production of that output is relatively fixed as well. Therefore, any technology that would make it possible to produce a larger quantity of output per unit of work time will make it possible to produce the fixed volume of output with fewer workers. This is the lump-of-labour argument that was used rather effectively by anti-immigration groups in the 1940s.[21] If immigrant labour were allowed to participate in the production of the fixed output, then less and less work would be left for the native labour force. This is an effective argument for no-growth periods, such as the present. If a secretary-typist, with the aid of a word processor and other electronic office equipment, were to produce twice the output of office work produced formerly per unit of time, then obviously the office could make do with one less secretary-typist. Clearly, when the volume of output is fixed in the aggregate, the effect of productivity-increasing technology is employment-contracting, other things being equal.

The fifth source of concern derives from a common failure to distinguish between effects at the level of the process at which the technology is implemented and utilized (the micro level) and effects at the level of the whole economy (the macro level), and the common tendency to extrapolate from the level of the process to the level of the whole enterprise, to the industry, and to the level of the whole economy. The frequency of such macro inferences from micro incidents caused Samuelson and Scott[22] to caution against what they called "the fallacy of composition": that which is true in individual instances is not necessarily true on the aggregate. A decrease in employment at the level of operations at which the technology is applied does not necessarily mean a decrease at all levels in the enterprise, does not necessarily mean employment will decrease in the industry to which the enterprise belongs, and certainly does not mean employment will decrease in the economy at large. Yet, all pronouncements to date on the negative effects of microelectronic instruments and processes on employment are based on micro-level studies. Some of these, such as the Swiss Watch Industry case and the National Cash Register Co. case, make reference to the decrease in employment of production workers; while others, such as the Telex Machines case and the manufacture of Electronic Calculators case, make reference to the manyfold increase in productivity at the production level and infer from that, significant decreases in employment of production workers.[23]

What do such cases tell us? They reveal a very common, historical reality – namely, that technology tends to reduce the labour intensity of production and that improvements in technology tend to reduce it further. But, such reductions of the labour input in the production of individual goods and services are not sufficient in themselves for a pronouncement on the effect on employment at the process level, the enterprise level, the industry level, or the level of the economy at large. The decrease in labour intensity per unit of output may be more than offset by an increase in the number of units produced, in which case the employment of production workers will increase. In an investigation of the effects of word processors on employment, we found that the increase in productivity was more than offset by additional work and by work activities that could not have been undertaken by conventional manual and electromechanical processes.[24] In addition, when productivity in a given process increases and the volume of output increases as well, the larger volume has employment implications for the nonproduction staff of the enterprise – for management, purchasing and sales, finance, secretarial, transportation, and many others. And, an examination of the effects on employment beyond the confines of the enterprise will establish that the larger volume of output involved larger quantities of materials, more transportation services for both the materials transported to the enterprise and the output taken away, more financial and insurance services, more retail and wholesale services, and more services to users of the goods and services. And, of course, since the increase in productivity will become reflected, in part at least, in higher incomes, the higher incomes will become manifested in higher demand for other goods and services and more employment, on the aggregate.

A common weakness in the analysis of cause-and-effect relationships in economic matters is the tendency to limit the analysis to the first-order effects. Yet, the most significant effects – the final effects –

are the second-order effects or the third-order effects over time. The analysis that is limited to the first-order effects is incomplete, and the generalizations that are based on such analysis are usually wrong.

Case studies of individual processes are informative, but they do not in themselves constitute a sufficient basis for conclusions on the effects of microelectronic instruments, products, and processes on employment in the enterprises to which they make reference, in related industries, or in the economy at large. The effects on employment, on the aggregate, can be expected to be significantly different from the effects on employment at the level at which a given microelectronic instrument, product, or process is applied, regardless of whether that level is a stage of a process, a process, an industry, or a whole sector of the economy.

The sixth source of concern emanates from the perception of the occupational structure as pyramid-shaped and of the progression within the structure as only vertical. Such perceptions impose conceptual limits on employment opportunities: jobs become progressively fewer as one moves up the pyramid; and opportunities for advancement are limited to vertical progression. To women, who perceive themselves predominantly in low-level occupations at the bottom of the pyramid, such a structure has serious negative connotations: opportunities for advancement are limited by both the shape of the pyramid and the vertical progression, and there are no alternative employment opportunities for those who will be displaced from the low-level routine jobs by microelectronic instruments and processes.

Although some notable improvements were recorded in the occupational distribution of women during the 1971-81 period and there is increasing evidence of the occupational structure changing its configuration from pyramid to barrel, the distribution of women remains somewhat uneven, with 35 per cent in clerical and related occupations in 1981, 15 per cent in service occupations, and 10 per cent in sales occupations. Should predictions of increasing microelectronization of office, sales, and service activities materialize, a serious employment problem may indeed arise.

Response of Women to the Perceived Threat

Women have responded to the perceived threat of microelectronic technology by acquiring more education, by obtaining professional-level education, and by seeking employment in activities deemed less vulnerable to technological change.

Education[25]

Women have increased significantly their participation in postsecondary education: the number of women enrolled full-time in colleges quadrupled during the past 20 years and almost doubled within the 1970/71-1981/82 period; the number of women enrolled full-time in university stood at 183,025 in 1981/82, compared with 27,615 in 1960/61 and 108,759 in 1970/71. In 1960/61, women represented 70.7 per cent of total full-time enrolment in colleges and 24.3 per cent of total full-time enrolment in universities; in 1981/82, they represented 51.5 per cent of full-time enrolment in colleges and 45.6 per cent of full-time enrolment in universities.

The achievements of women are even more impressive in terms of university degrees earned: in 1965, women earned 30.4 per cent of the bachelor's and first professional degrees awarded; in 1981, they earned 50.3 per cent of the degrees. At the master's level, women earned only one in five degrees in 1965; in 1981 they earned 39 per cent of all master's degrees. At the doctorate level, they remain considerably behind men, but there, too, a significant improvement has been recorded – from one in ten in 1965, to one in four in 1981.

Reference is warranted perhaps to the nature of education pursued by women, since there prevails a widespread view that employment security and advancement in the "postindustrial society"[26] will be related to a strong component of scientific, mathematical, and technical education. The current emphasis on "computer literacy," whatever that may mean, is a manifestation of that view.

There is no evidence of need for such knowledge for employment, for security of employment, and for advancement in employment for most of the labour force. A very small proportion of the labour force can be expected to be employed directly in the design, implementation, operation, and maintenance of the technological infrastructure. There is nothing wrong in making people knowledgeable of the technology; but it is critical that in this period of technological evolution people not be caused to associate that knowledge with employment and employment security. There is increasing evidence, the personal computer being a good example, that operation of the technology is being simplified to a level that will require very little education and training for its operation. Therefore, the education that most of the labour force will require for employment will likely be in the nature of what has been heretofore – namely, education related to the multitude of professional activities and activities related to them functionally, to managerial and administrative activities, and to general activities that relate to the organization and functioning of society. In this context, women appear to have been acquiring the proper kind of education, as evidenced by the occupations in which they have recorded the highest rates of entry in recent years.

Occupational Trends[27]

The occupations in which women recorded the highest rates of entry during the 1971-81 period are the nongovernment management and administrative occupations; professional occupations; and occupations in natural, mathematical, and social sciences. The managerial and administrative group recorded the highest numerical increase – almost 144,000 within the brief period of one decade – and the highest percentage increases, ranging from a threefold increase of managers in community, business, and personal service industries to a 26-fold increase of managers in sales.

Professional occupations and occupations in natural, mathematical, and social sciences recorded the second highest rates of entry, ranging from an increase of 110 per cent in the number of university teachers to an increase of almost 700 per cent in the number of veterinarians. The most notable changes among these groups are the very substantial increases in professions that heretofore have been dominated by men: engineers, from 1,220 to 7,740; lawyers and notaries, from 785 to 5,150; physicians and surgeons, from 2,890 to 6,925; and accountants and auditors, from 15,655 to 43,470. Among the natural, mathematical, and social science occupations, the number of systems analysts and computer programmers increased by 438 per cent; economists, by 322 per cent; community college and vocational school teachers, by 359 per cent; and instructors, managers, and coaches in sports and recreation, by 194 per cent. The extent to which these and other increases constitute a redistribution in the occupational structure of women is indicated by reference to the overall increase in all occupations, which was only 64 per cent.

The redistribution is indicated also by the relatively lower rates of entry in some of the traditional women's occupations: thus, while the overall increase in all occupations was 64 per cent, typists and clerk-typists recorded an increase of only 21.3 per cent; elementary and secondary school teachers, 23 per cent; secretaries and stenographers, 53.5 per cent; and telephone operators, 13.5 per cent. Personal service workers and farm workers recorded decreases.

The information on education and occupational trends manifests the trends in an evolving microelectronic infrastructure in the economy and society. Departures from the trends, such as the continuing above-average increases in clerical occupations (other than clerk-typists), in tellers and cashiers, and in bookkeepers and accounting clerks, should be viewed as aberrations, which manifest the existence of parallel systems in the period of transition to the telematic infrastructure.

Concluding Comment and Policy Issues

In the consideration of the relationship between technological changes and employment it is necessary to distinguish between the core infrastructure of the economy and society and the increments and changes in the infrastructure core. Changes in the technology of the infrastructure and the effects they have on products and processes, on the organization of enterprises, and on the organization of work represent relatively minor changes to the vast core infrastructure. They do indicate general trends in the nature of changes that will take place over the decades to come, but it would be misleading to extrapolate from such trends and formulate specific manpower policies for the entire infrastructure. A clear distinction should be made between the requirements of the core infrastructure – which provides the bulk of employment – and the requirements of the incremental and changing part of the infrastructure. The continuing and excessive emphasis on the changing part and the misguided trend extrapolations have detracted attention from the requirements of the core, which for the most part continue to be traditional in nature.[28] For example, while it is true that the economy is becoming increasingly an *information economy*, in itself that is not new; it has been evolving as an information economy since long before the introduction of microelectronics, and increasing proportions of the labour force have over the years become involved in whole or in part in information activities. The introduction of microelectronic technology may accelerate the evolution, but that is all. This in no way suggests any significant changes in the production of "information occupations."

Policy Issues

1) The evidence indicates very significant increases in the entry of women into managerial and professional occupations during the 1971-81 period. Notwithstanding that evidence, the proportion of women in the stock of such occupations remains relatively low. Therefore, women should be encouraged and assisted to enter in larger numbers into educational programs that lead to such occupations.

2) Reliance on immigration for skilled manpower over a period of almost 40 years has left Canada with a terribly inadequate skill-training infrastructure. The

problem has been compounded by entry barriers into training programs. Allegations of "negative attitudes of Canadians towards blue-collar work"[29] are nothing more than inept efforts to distract public attention from the reality of dismal policies and self-serving regulations. The gaps of skilled trades in the occupational structure are an open invitation to women to challenge existing regulations and inadequate facilities and programs.

3) In the consideration of the relationship between technology change, education, training, and employment, care must be taken to distinguish between the *core* infrastructure of the economy and society and the *changes and increments* to the core infrastructure. New technology impacts only incrementally and minimally on the vast core infrastructure. The technology and its effects do signal trends for the future, but serious negative consequences will occur if such long-term trends should become the basis for manpower policies for the entire infrastructure or if they should become the focus of manpower policies to the neglect of the requirements of the core infrastructure.

4) There is a general tendency to seek a *direct relationship* between an emerging technology and employment. Yet, no technology, however widespread its application, has been a major source of direct employment, specific to the production, operation, and maintenance of the technology. The total number of technology-related jobs has been very small relative to total employment. The relationship between technology and employment is mostly indirect – through the contribution of technology to productivity, lower costs and prices, higher incomes, higher demand, and growth. Therefore, *the education and training provided for the majority of the population should relate to the wide diversity of work activities performed in society and the economy at large.*

5) It is critical that people not be misled into thinking that knowledge of computers and computer-related processes will provide employment and security of employment. "Computer literacy" should be viewed in the same context as general literacy.

6) The rate of microelectronization has diminished significantly in the past few years – a result undoubtedly of the slowdown in economic activity. A resumption in rates projected in the 1970s should be expected to follow economic recovery. When that occurs, substantial displacements will take place from process-specific employment activities. Therefore, the brief respite that we are now experiencing should be exploited to advantage with educational and training programs that will facilitate easy transition to alternative employment.

7) The technology will impact on the boundary lines dividing related occupations. Individual occupations will gain or lose in the process, depending on their influence in the production process. This suggests a need for protection of occupations that lack the organizational power to withstand predators. Women are particularly vulnerable to such incursions on their work activities, since large numbers of them are engaged in the provision of ancillary services. When work-related occupations are threatened, the victims are likely to be those whose activities are subordinate.

8) Most working women are either not organized for collective bargaining purposes or their organizations have not negotiated contracts that provide protection against unilateral management decisions on issues that relate to technological changes and their employment effects. Therefore, public policy measures are necessary to provide the protection that other workers have through their organizations.

9) The notion that work should be allocated on the basis of sex and that some work activities are suitable for men and some suitable for women is imbedded in the cultures and practices of all societies. Microelectronic technology can do little to change that, except perhaps for its capacity to increase access to information related to occupations and employment opportunities and to increase the flow of work-related information and access to it. To the extent that such information has been restricted or biased heretofore, its availability and access to women should benefit them in the marketplace.

Comments by Lorna R. Marsden

In Frederico Fellini's brilliant film *8-1/2*, there is a beautiful woman dressed in a Scandinavian Airlines uniform whose calm voice with its soft tones carries over the frantic babble of the wretched mob who follow and harry the hero – the film director – everywhere he goes. Professor Peitchinis's chapter on microelectronic technology and female employment is like the Scandinavian flight attendant on the subject of technological change. In this chapter and in earlier papers on related subjects, he has carefully examined the evidence and the context of the arguments, and looked at the medium-term prospects; and in each case he finds that probably the benefits outweigh the problems of the changes we are now experiencing in our modes of production.

This time, he reminds us – to our benefit – of the important nonadditive nature of the micro and macro levels of analysis and of changes. He reminds us to distinguish between the core infrastructure and "increments and changes in the infrastructure core." He points with some force to the failure of public policy in Canada to deal with labour market adjustments and with replacing old technologies with new ones. He reminds us that we have a long-term habit of replacing workers rather than retraining them.

I would like to comment on each of these four issues because I think Professor Peitchinis has passed somewhat too easily over the sources of disquiet among those interested in the female labour force. While his main contention may be perfectly correct, it would be useful to elaborate somewhat more than he has done on the nature of the fears and the problems. "What is perceived as real, is real in its consequences" said W. I. Thomas many years ago. In short, while Professor Peitchinis plays the Scandinavian flight attendant with the calm and beautiful voice, I will play the harrying and tiresome mob.

First of all, let me expand on several of his points and then come to the question of public policy. It is useful to be reminded that one cannot focus on case studies of employment impacts or job-content impacts and extrapolate those to the whole economy. I think we are guilty as charged of this error of logic far too often. But there are concerns we face at the macro level of the economy quite separate from those. For example, two issues face Canadians today that can be seen to have potential problems for the female as well as the male labour force. One is the centripetal force of the U.S. economy. David Birch of the Massachusetts Institute of Technology, who is studying the creation of small business in the United States, Sweden, Canada, and the Netherlands, claims that no new industrial production jobs are being created in the United States and none has been created since 1978. The actual number of jobs has increased, he argues, because U.S. industries are pulling their branch plant operations back home.

The dominating position of the U.S. economy with its untoward impact on other western economies, including Canada's, has the potential to reshape the nature of our access to technology and jobs. The polarization between low-wage service jobs and high-wage expert jobs – the decline of the middle-class – may be faster in Canada if middle-class jobs are sucked south of the border. While the new jobs may be created, as Professor Peitchinis suggested, will they be created in Canada? Will, as Donald Macdonald appears to be suggesting, the free trade option be the lesser of two evils – loss of economic control versus no growth in a Canadian-controlled economy? If the second- and third-order effects of technological upgrading and new technology in the production of goods and services are beneficial, will they be beneficial to Canada, and not only to Central Canada but also to British Columbia, the Gaspé region, Cape Breton, and all across the country? Women workers are still somewhat less mobile than men, and when they are mobile, their experiences of migrating to jobs are not attractive in comparison with that of their male peers.[30] I am glad Professor Peitchinis spoke about the gulf of ignorance, because I agree that is exactly the problem.

The second concern is an already familiar one having to do with the technical possibility of running information economies over long distances. Transborder data flows raise many questions usually having to do with national control, but they also raise questions about jobs.

Data entry and data transformation jobs do not necessarily have to be in Canada. (Systemhouse, for example, a Canadian firm, now has more operations in the United States than in Canada. The firm found it was less expensive to do a great deal of its work south of the border, according to the business press.) How many of the Canadian financial operations and databank jobs could be performed outside, rather than in, Canada is a question related to the potential for job creation in so-called "women's jobs" in Canada.

But I agree with Professor Peitchinis that most of the concern about the impact of technological change on female employment rests at the micro level – the level of the industry, occupation, plant or office, or individual careers. Feldberg and Glenn,[31] in their studies of office automation, divide the micro level of analysis into a discussion of occupational structure, the organization, and work process. There are several reasons for this and several concerns that I think are not adequately specified in Professor Peitchinis's chapter.

There is often an implicit – sometimes explicit – confusion in studies of technological change between the existence of jobs filled by women and the desire for greater equality for women in employment. In *Machina ex Dea*,[32] the issues are addressed forcefully by feminist theories. Stoutly fighting off technology will only temporarily preserve jobs and will not improve equality.

The fears about the impact of technological change are (1) that jobs of any kind will disappear, and (2) that jobs will be downgraded in skill content, occupational status, pay levels, and future possibilities; that is, while there may be more or fewer jobs, the existing jobs may be less desirable. In some ways, this is the same fear expressed about the "declining middle-class" – that is, that middle-class occupations are being shoved into the two extremes, pushing more jobs into the working class and a few into the upper-middle-class in terms of education/skill requirements and pay. So two separate questions are being asked. One is whether or not there will be jobs for the increasing proportion of the labour force that is female. The other is what will the quality of those jobs be. Professor Peitchinis deals with the first but not with the second of those questions. It is the second question that arises from a concern for the advancement of women, not women in the highly qualified sector of the labour force, but women in low- to medium-skill levels – the mass of clerical and service workers.

That second question arises in part from the lessons of history. I am quite prepared to admit that it is bad history to remove certain incidents or outcomes from their context and use such extrapolated history to predict current outcomes. This technological change is not the industrial revolution. It is not the agricultural revolution. It is not the nineteenth century, nor are the laws and social attitudes the same as they were during the earlier decades of this century in Canada or elsewhere. Nonetheless, we cannot help looking over our shoulders. There are simply too many women alive who have vivid stories of the postwar period when women were shoved out of production jobs to go back home or into less-well-paying jobs outside the industry. There are too many women who tell their daughters and granddaughters who it was that lost their jobs first and who had the first pay cuts during the 1930s. There are too many women now who, caught in the daycare/income squeeze, try to do word processing or data entry at home and look after young children at the same time. At a recent seminar given by the Metro Social Planning Council of Toronto, which I attended, a woman in the audience described the word-processing business she runs. She hires women who have decided that they must be home with their children but who also need an income. As she said, you cannot do word processing and take care of children simultaneously, so women take care of their children all day and operate word processors all night. Paid on a production basis, there are no benefits and no paid time for sickness or holidays. The technology makes this work possible, but it does not solve any of the real problems of child care, required income, or benefits and protection that these workers require. Yet overhead costs are saved for the employer, and it is now technologically practical.

It is these types of knowledge and concern, on the ground as it were, that raise anxieties and give credence to the historical accounts of how women were displaced by young men in operating the new machinery of the garment industry or the textile production industries, of the management sector of the office, and so on. Even in the health field, doctors gained control – indeed, monopoly – over certain practices by pushing out midwives, herbal therapists, and various other alternative health practitioners – many of them women – by demanding licensing in Quebec in 1788.[33]

These men, having given their women competitors the heave-ho from the health field, then managed to keep control of entry into medical schools in Canada, first by excluding women until the 1880s, then by a quota system until the 1960s, and currently by quite effective segregation into certain specializations. Consequently, while I am, by nature and by virtue of studying the evidence, not pessimistic about the technologies now being introduced as the information sector, I am considerably more sympathetic to the anxieties about the future of women in the Canadian labour force.

Above all, I am sceptical about economists' analyses (although less about Professor Peitchinis's than most) because of their failure to reconceptualize the field of labour economics to include the productive work that women do. I make a distinction between the economists working for governments and economists in universities; that is, I would expect economists free to think about economic activity rather than government programs to recast the field to try to explain what is really going on. What is really going on in economic activity is not captured by most economic theories with which I am familiar. Some economists talk about the informal economy. Indeed, nowadays some of the new ministers in the Mulroney government talk about the informal economy and the need to capture taxes from all those transactions outside the cash economy or "underground." The female economy has always had a very large component outside the cash economy. Women are in a household economy. The economic activity that women maintain in the household is implicit in the notion of a "second wage" and in the idea that it is "all right" to pay women less. The exchange of services such as babysitting and organization of children's activities in voluntary groups like the Brownies and Cubs, the exchange of clothes and food, and the skill training from one generation to the other are all noncash activities without which most households could not function. This is no picture of a village past where gardens were worked by women and men, where home canning and home sewing were the norm. This is a description of the modern apartment or suburban household.[34]

It is a feature of public policy to ignore such activities, and since I am not an advocate of converting all domestic labour into paid labour, I am not advocating state monitoring of these activities. It would seem worthwhile, however, to avoid the sorts of errors exhibited in the thinking of economists, such as Albert Breton in his recent study for the Economic Council,[35] in which marriage patterns are the villain to the smooth functioning of the labour force as far as women are concerned. Indeed, he only follows the dominant model of economists who regularly see all activity outside markets as infinitely malleable and ultimately vulnerable. The problem they set for themselves is how to make women most resemble men.

Public policy has failed to help with the adjustment of workers and of business. I agree with Professor Peitchinis; but I would argue that the reason that public policy has failed is that it has relied far too much on the perception of white able-bodied males built into the economic models of social behaviour and far too little into the socioeconomic models of social behaviour.[36] Social behaviour is usually dragged in to try to patch up poor results; females' relation to technology is "difference in socialization" rather than systemic exclusion from training (cf. Abella) or wage differences. At the present time, at least at the microeconomic level, economists are ignoring what people really do. Professor Peitchinis argued that the new information technologies have the potential to help workers maintain their skills at home and to find jobs rapidly, thus reducing both frictional and structural unemployment. But he knows, as we all know, that the type of knowledge that he suggested could be put out over home computers is subject to three major, and quite insurmountable, problems.

First, all such information is captured by the private sector or by government. The private sector wants to make a profit on it and the government is subject to a variety of restrictions on it, such as statistical protection of privacy, human right constraints, and jurisdictional problems.

For the private sector the problem is that the production of such knowledge will not be profitable (since most people know that the best and fastest way to get a job is through social networks). Governments appear to be quite unable to predict job demand; occupational forecasting has not been a great success (COFOR – replaced by COPS); and the costs of the type of program being proposed are very great.

The second problem is that we are social creatures more than we are economic creatures. We use television more for fun than for information. We are not very self-starting except for certain highly specified tasks. Home instruction courses and teach-yourself books are bought in the millions, but it is most unclear to what extent they are used. The reality is that people prefer to meet in groups, that instruction in new techniques and new skills comes most efficiently on the job or in the classroom. Distance education is backed up by individual tutors and personal social contact. If public policy makers assume that the potential of the new technology can be used in that way, I suspect that they will be correct in limited applications. Telidon has not been subject to the demand that would enable it to live up to its potential.

The third problem is a larger one. The inequalities among Canadians are very substantial. The more usual class inequalities have been described elsewhere. Let me focus on our mammoth problem of adult illiteracy. About 20 per cent of Canadians cannot use information technology because they cannot read or interpret even simple instructions without assistance. We all know that they are the people most likely to be unemployed and to require retraining. This inequality is even greater among women The Canadian Commission for UNESCO estimated that in 1976 about 47.6 per cent of the adult population had less than a grade 10 education, more women than men. In 1981, 41.0 per cent of native peoples in Canada had less than a grade 9 education, and 19.8 per cent of the non-native population were in the same category.

Even though most jobs created will not be directly associated with the production or use of information technology, the training required to switch jobs or change job content is not the type of task that can be readily conveyed on the screen. As an expert from the Brandeis School of Employment Studies put it recently, the task is to "sift, sort, and certify" – that is, to sift out the literate from the illiterate, to sort people into a variety of levels of training programs, and to provide evidence of accomplishment at each step of the way into new jobs. To train those who train others is the first step in labour market adjustment. It is not a step we have taken yet in Canada.

Somehow, Canadian women concerned about these issues are not convinced that the rule is women and children first when it comes to retraining programs. We look at who controls the programs, who controls the governments, who controls the unions, and who runs the training programs and ask what their interests are, or if we are more polite, we ask how they view the role of women in society. Evidence from the Abella Commission tells us that training places, training programs, and training outcomes are not equal. Are we seen as equal partners in the economy and the household? Are we expected to share power and responsibilities? A review of our history tells us that we fight to gain equality every little step of the way. We are not convinced when typesetting is divided into "typists" and "layout designers" – and the typists are all women who are not union members and the layout designers are mostly men who are union members – that technological changes are working in our best interests. There are many other examples. We look at the income distribution in society and we realize that, even with the same occupation, education, years of experience, and hours of work, our incomes will be lower on average than men's. We realize that it was December 9, 1883, that the call for equal pay for women was heard from the Toronto Typographical Union, as was the call for the 9-hour day. Everyone got the 9-hour day and then the 8-hour day, but women still do not have equal pay. So it will take a most convincing change in attitude on the part of employers, unions, and governments to convince most interested women that new technology will not be accompanied by some new scheme of organizational control or social security that will continue, or even perhaps increase, the second-class status of the majority of women workers.

During a debate between the leaders of the three major political parties, sponsored by the National Action Committee on the Status of Women on August 15, 1984, Mr. Mulroney said in response to a question about the impact of technological change that: "we must stop those cuts of jobs where women are congregated."[37] But as a matter of public policy, it is not at all clear how such a statement could be translated into any meaningful action in the public sector. Is the Prime Minister really of the view that the technological transformation of the office, the retail store, and the packing plant can be stopped? The economic statement of his Minister of Finance and the cuts announced by his President of the Treasury Board would tend to suggest that the business class will be encouraged to hurry up such a transformation. Anyway, jobless growth is a more important problem than direct cuts of jobs in these sectors.

What would be most useful at this point would be the establishment and maintenance of good data on the changes that are occurring – by industry, occupation, gender, and age – as well as on the changes both in machinery (or instruments of production) and in the social organization of production. Statistics Canada might usefully design and establish such a system. All of us working in this field are bedeviled by the lack of microdata on the process of change. Indeed, this is crucial to an understanding of the issues.

So what about public policy? In my view, the issues we face in public policy are not much changed by the arrival of an information sector in the economy. We still need equal-pay laws that are effective and enforced. We still need good-quality child care arrangements – I leave the variety open. We still need benefits for part-time workers. We still need employment equity programs to overcome systemic discrimination. We still need more progressive union policies and collective agreements. We still need the capacity to transfer licences for a variety of occupations across provincial boundaries without problems – for example, teachers' licences. We especially need good and enforced occupational health and safety standards in each jurisdiction. We need to have employment standards acts upgraded to cover "nonproduct" work. Working at home, for example, probably does not come under the Employment Standards Act in Ontario. None of these issues of public policy is new. None, except the need to incorporate information production in the legislation, is specific to the new technology. Many of the fears about the new technology are simply the fear that the old problems will be exacerbated. A general reassurance that the overall economy will grow will not, therefore, relieve these concerns. Now, if at the Valentine's Day Summit or the March Economic Summit, the First Ministers and the Finance Ministers of this country were to focus primarily on these questions of public policy or to announce a monitoring process of changes in jobs and employment related to technological change, you might begin to see a calming of the voices of women. Do not hold your breath!

Panel Discussion

James A. McCambly

I am here today as a representative of the Canadian Federation of Labour. We are a national organization comprised of ten member unions representing men and women in most economic sectors and in all regions of the country.

I would like to stress that I do not profess to be an expert in this field. I hope that you can accept me here as a friend in terms of one who is very interested in the issues that are before you. They are so immense that, I feel, to give a paper of ten minutes or so is only scratching the surface.

The background studies commissioned for this conference and the remarks made by several speakers have already dealt with employment statistics and with the types of technology having an impact on the employment of women. Rather than duplicate these contributions, I think that I can be of most use by presenting what I think is an emerging *union* perspective on this matter.

Technological change in the workplace has been a major concern since the very beginning of the labour movement in this country. It is a necessary and never-ending part of human progress. What we are seeing today with the microelectronics revolution is the *acceleration* of a trend that has been with us for a long time.

Unions, it must be admitted, have most often concentrated on the *threats* posed by technological change. In the short run, change almost always means some hardship and dislocation at individual workplaces. It has been in the nature of union work to fight to protect members at that level. For that reason, unions have earned a reputation for automatic antagonism to anything that looks like technological progress.

But, if you look at the broader picture, it becomes clear that unions, far from blocking technological change, have often been instrumental in making new machines, and new approaches to production, function as they should.

There have been, and will continue to be, concerns about the way particular changes are implemented in given industries or plants. But many unionists now recognize that technology has tended to bring broad benefits including reduced hours of work, better working conditions, and more security for our standard of living.

It is important to say early in this discussion that we believe there are ways in which women can be helped to benefit from technological change at least to the same extent as men. Unions are in a position to make a unique contribution to achieving this goal.

Union locals in the workplace – made up of the people involved – are good protection against the unfair, thoughtless, or illegal actions by employers that sometimes accompany the introduction of new technologies.

At the national level, union organizations – such as the Canadian Federation of Labour – are working to ensure that governments, sectoral organizations, and specific industries adopt approaches to technological change that benefit, rather than punish, Canadian workers of both sexes and in all occupations.

What are some of the potential benefits of technological change to women in the workforce? The number of traditional jobs for men and women is declining and will continue to decline as evidenced by the current rate of unemployment. However, of the jobs that emerge, there will be proportionately, I believe, more opportunities for women.

The high-tech revolution has been with us for more than a decade. And during that period more women have been able to enter the labour force than ever before. There is no reason to believe that this trend will not continue in the future, providing, of course, that the economy does not take another nose dive.

Further, the economy seems to be evolving in ways that place a greater emphasis on: the provision of services; jobs that call for analysis and judgment; advice and counselling for clients; selling products and services; health and personal care; and, the collection, input, and retrieval of data. These are functions that can be performed equally well by either sex.

Technological change promises to eliminate what little remains of the "strength barrier" – the pro-male bias built into some jobs because of the physical strength needed to perform them. Many of the unions that our Federation represents are in heavy work industries. Although the number of women involved in construction trades is very small, there are significantly large numbers involved in other industries such as mining, where those who *are* involved have demonstrated that they can operate hydraulic equipment, use mechanized hand tools, and install modern equipment with the same skill as men. As women have proven themselves to be good employees in other ways too, their numbers will inevitably increase – with full support from the unions representing them.

New technologies in some industries promise to make work life more flexible. For the single mother, that could mean using "flex time" schedules or take-home apparatus to meet demands in a better way as a wage earner *and* as a parent. It also means that single parents will not have to turn jobs down because the cost of daycare would consume their salaries.

Of course, there is a negative side to the ledger. High among our concerns are the negative impacts of new technologies on the health, safety, and comfort of workers. There appear to be many new stress factors – and that includes boredom – built into high-tech jobs, particularly those associated with new monitoring and surveillance systems and with assembly lines.

The telephone operator who gains by the introduction of equipment that is less complicated to operate may lose because of much higher production quotas enforced by a monitor that never sleeps. Food preparation, a process that previously required personal attention, can now be done on a mass production basis. The process uses hundreds of computerized menus but very few people; the work is extremely monotonous and, I might add, so is the food.

We have heard a lot about equipment that is badly designed for comfortable human use. In our rush to capitalize on new technologies, we must not neglect good design and thorough testing. I believe that most health problems related to the new technologies are solvable. But an effort is required to ensure that the results of ergonomic and psychological research are widely available – especially to employees who are first-time users of new equipment.

We in the Canadian Federation of Labour are principally concerned about job displacement, especially as it affects workers in mid-career. Losing a job, seeking new employment, or entering a training program is demanding at the best of times. If the shift is abrupt and poorly planned, it can be a very tough financial and psychological blow. As women currently hold many of the repetitive jobs that technology seeks to mechanize, they are particularly at risk. This tendency is compounded by the fact that huge sectors in the midst of change are not highly unionized. This includes the banking, commercial, and retail sectors where women fill the majority of positions. They have no organized representation through which they can present complaints or suggestions or take part in the planning of their own future. As such representation is critically important in determining the ways and the extent to which women can benefit from technological change, their active involvement in unions – or in professional associations – should be promoted at every opportunity.

I have mentioned some of the benefits and some of the problems that women face in approaching technological change. What type of response will ensure that the gains are achieved and the penalties are avoided?

In the Canadian Federation of Labour, we see two parallel streams of action. The first is to identify and *eliminate barriers* that affect equal opportunity of participation of women in the labour force. The second is more positive – that is, to *promote employment* by ensuring that suitable conditions exist.

Some of the reasons that employers now give for preferring men will not change with the introduction of new technologies. If, for instance, overtime must frequently be worked, travel is often required, important decisions must be made, or heavy lifting is involved, the tendency may still be to hire a man or lay off a woman before a man – on the assumption that it will be more difficult for a woman to meet the employer's needs.

So, among the barriers to be dismantled, the biggest is prejudice about women's ability to perform nontraditional jobs. Oddly enough, women need as much assurance on this point as men do. Many women wrongly assume that traditional male jobs would be too difficult or too unpleasant to interest them. As well, it seems that, on the whole, women stick to the more traditional areas of study at university and college. Somehow, we have to demonstrate that very few, if any, workplaces are off bounds to either sex.

Through collective bargaining, we can work to eliminate wage differentials that encourage men but discourage women. In fact, the wage differential is less for unionized women than for nonunionized women. Unionization, or some other form of collective association, will give a powerful voice to the voiceless.

In this positive stream, we can work to provide facilities and services that enhance the suitability of women as employees. Clearly, child care is a greater barrier to employment opportunities for women than for men; there is a need for child care facilities at, or close to, the workplace. There is a need to re-equip some workplaces with simple things like showers and washrooms for *both* sexes. Society must provide services such as: good information on the availability of jobs and on the skills required to fill them; education to close the skills gap between men and women; networking schemes to help women find jobs and compare notes with other women in the job market and to counsel young women on career choices; and publicity campaigns to change attitudes and promote involvement.

In support of these types of initiatives, I am attracted to the idea of levying a sort of tax on very productive machines. Requiring that a tax be paid for the industrial robot, or the automated bank teller, or the computerized telephone answerer might be a way of financing new programs for employees – programs that improve their skills and help them to overcome workplace barriers.

Of course, the best protection for workers of both sexes is to be union members in an expansive economy. If the economy is stagnant, then more productive technologies are going to put more people *out* of work than *into* work. If the economy is booming, more employment is likely to be created than eliminated.

In conclusion, I would like to point out that when we speak of introducing new technologies, our focus is too often on the purely *quantitative* results it may bring – more units of production and more wealth. Those things are certainly important. But, for me, two of the really great challenges of the new technologies are the distribution of wealth and qualitatively better work experience. Technological change puts more power and more wealth in fewer hands, with less reliance on, or need for, people and with less control over the distribution of wealth.

In the qualitative sense, if employers and governments think of technological innovation partly as a way of relieving pressures on employees, of eliminating routine chores, of erasing prejudicial distinctions among employees based on their sex, and of using human minds to better effect, then I think the gains for every Canadian worker will be truly phenomenal.

François P. Paradis

Everyone agrees that we are entering the age of information and communication – or, if you will, the age of automation, the robot, and the computer. In other words, the industrial revolution of the nineteenth century is being succeeded by the technological revolution. At the time of the industrial revolution, it was impossible to predict, even to imagine, the impact that this phenomenon would have on our economic, social, political, and cultural life, not to mention the incredible number and diversity of new industries, inventions, and products that would spring up as a result. Similarly, it is virtually impossible today to attempt to describe the new economic trends that are being moulded by technological development and how they will influence our society. One need only remember that the assembly-line techniques of Henry Ford were the centre of controversy in the early part of this century, because the immediate result of their implementation was a reduction in manpower. In fact, it was the lower costs and higher productivity of such methods that opened the door to mass markets. Who, at that time, had enough vision and imagination to predict that the fledgling American automotive industry would grow to become such an important part of our economic life today?

Thus it is reasonable to assume today that the age of information and technology will, in the long run, create more jobs than it will eliminate, since we can assume that technological advances will open up a host of new fields and generate new products, the likes of which we cannot even begin to imagine.

Clearly, the transition from the industrial era to the information era will not be made without considerable upheaval and deep-rooted change. This is primarily due to disparity and unevenness in our human resource structure, which is ill-prepared for the new technology. Retraining will represent a major problem: in addition to technical expertise and skills, new attitudes and motivation must be taught. It is to this crucial problem that business, governments, unions, and society as a whole must turn their attention, and this must be done in a spirit of openness and with a keen sense of social responsibility.

And we must not procrastinate or, worse, try to impede the irreversible march of progress. Otherwise, our society will be swept aside by others that resolutely and boldly accept the challenge of the new technological age.

What will be the place of women in this changing future? Thanks to the remarkable changes that have reshaped their role over the last ten years, women now find themselves in an excellent position to carve out a special place for themselves in the labour market. There are several reasons for this.

The liberation of women, while still a subject of debate in certain circles, has profoundly changed our family, social, and religious life, not to mention our economic environment. In just a few years, dramatic changes have occurred in the patterns of married life, husband-wife relationships, and family structures; for example, the division of household duties and financial responsibilities, and the sharing of child education responsibilities are no longer the same, either because the wife has her own career or works part-time, or because the family is headed by a single mother. The changing status of women in society has led directly to large numbers of them entering the labour market. This trend can only increase with the advent of the technological age.

Under the impetus of this movement towards liberation, women have already begun to adapt to new conditions and to their new status and role in society. Their situation is in a state of constant flux, so that technological change, with all its diversity and complexity, will neither surprise nor intimidate them. From the very start, women will be better able to adapt, will be more flexible, and will be more receptive to the rapid pace and complexity of change. They are mentally prepared for it.

The industrial age put a premium on physical labour and strength. In the information age, however, the accent will be less on physical activity and more on intellectual or mental activity. Thus those who feel that women will then be at a disadvantage are either misinformed or foolish. It requires only a bit of imagination to recognize the huge impact that the transformations and changes connected with technological development will have on our way of life and on work patterns.

Certain trends have already appeared that are changing our traditional ways of thinking, such as the career woman who decides to have children and raise them without quitting her job; part-time work; job sharing; working at home; job choices made on the basis of the quality of working life; greater leisure time; pre-retirement; and so on.

In its submission to the MacDonald Commission, the Canadian Federation of Independent Business stated that 70 per cent of new jobs created in this country were in the small and medium-sized business sector. Peter Drucker reported that the same is true in the United States.

That is not to say that large corporations will disappear. However, entrepreneurship will become more important in our economy as small and medium-sized businesses gain access, through computers and other new technologies, to the same production, developmental, and management tools as those used by big business. In this new economic and social context, which cannot even be defined or measured accurately, who is better equipped than women to exploit it to the fullest? Job sharing, part-time work, and working at home are concepts that can easily be adapted to the new family lifestyles that are evolving. I would be the last to limit the role of women in the working world of the future to those duties they now perform.

I believe that women have already started on the path to a new economic era, that there will be no need to "unlearn" skills – a traditional concept of structural organization in the industrial age. There will certainly be battles to be won and resistance to be overcome in the quest for a larger and more equitable place in the new economic order. But this is nothing new for women. The struggle for equality began with the first stirrings of the liberation movement.

It must be understood, however, that the age of information and technology will, over the long term, lead to improvements in the quality of life and in career choices and leisure activities; it will also lead to the development of a multitude of new products, discoveries, and services that are still undreamed of. As a result, the labour market will expand, as will the role that women will play in it.

Over the short term, the greatest challenge, not only for women but for society as a whole, is to navigate successfully through the period of transition, revolution, and adaptation – certainly a formidable task! It must be understood that technology will not dehumanize us and will not eliminate the need for personal discipline or social responsibility.

Automation, on the other hand, will force us to strive for excellence in our personal performance – and thus will in some ways counterbalance technology.

I remain confident and optimistic about the future, and I firmly believe that all women should feel the same way.

Ratna Ray

While researchers keep on assuring the general public that new technology is both employment-generating and employment-reducing, the reality is that a vast number of women remain vulnerable to the new technology-based productivity drive. More than two-thirds of all female labour force participants are employed in service and support-related occupations.

Technological change has the potential for both good and bad effects, depending on the manner in which the change is introduced. Public policy should be aimed at nurturing the positive consequences and preventing the negative ones.

Professor Stephen Peitchinis stated earlier that the rate of technological change has slowed down notably. I tend to agree with him. If one looks at the federal public service as an example, it is evident that, notwithstanding the fear about 1984, its offices are not flooded with new technological office equipment. Far from being the "office of the future," the administrative and financial services are governed by tons and tons of paper.

We seem to be in what I call a grace period. This is a good time to plan and institute measures to prevent the undue negative effects of technological change and enable employees to adjust to the evolving change-over process.

My comments will focus on the federal government because it is the largest single employer in this country, and its policies and programs usually have a demonstrative effect on the provinces.

What are the current mechanisms of adjustment at the federal level?

In terms of legislation, the principal instrument is the Canada Labour Code, which applies to the federal jurisdiction but not to the public service (in relation to technological change).

The Canada Labour Code is designed to encourage employers and employees to negotiate on the issue of technological change. This provides, among other things, a definition of technological change; obliges the employer to give 90 days' notice (the June 1984 changes to the Code provide 120 days, but this has not been proclaimed as yet); and stipulates what should be contained in that notice.

The major problem with labour legislation is that less than 27 per cent of women are members of unions, and since the federal labour code only deals with organized labour, far too many women are left without minimum employment standards that would govern technological change in a manner aiming to *prevent* disproportionate adverse effects. When the report of the federal Task Force on Micro-Electronics and Employment came out in November 1982, an analysis of collective agreements as a positive instrument for women showed very disappointing trends. As of May 1982, 72 per cent of these agreements made no provision for prior notice of technological change. More than 81 per cent of the agreements had no positive provision for adjustment to change, such as training, retraining, relocation allowances, work sharing, or labour management committees.

Since two years have passed since the report of the Task Force was published, I thought that it would be useful to see if more collective agreements today contain better provisions in order to cushion the technological shock. My disappointment is deepened by the revelations. Figures for 1982 show that more than 64 per cent of the collective agreements surveyed did not have provisions regarding advance notice; more than 76 per cent had no provision for training; 95.5 per cent showed no hint of relocation allowances; 91 per cent were silent on notice of layoff; and last, but not least, 85.6 per cent did not contain a word about joint committees for planning and managing technological change.

For 1983, the figures show that 67.4 per cent of the collective agreements had no provision for advance notice or prior consultation; 78 per cent had no provision for relocation allowances; 92.6 per cent had no provision for notice of layoff; and 86.9 per cent had no provision for labour management committees.

Since the year 1984 worried people about an ominous Orwellian rendez-vous, I thought that the figures for that year would be far better. This was not the case. As of November 22, 1984, the situation appeared to be as follows: 55.4 per cent of the collective agreements had no provision for advance notice or prior consultation; 65.9 per cent had no provision for training or retraining; 90.6 per cent had no provision for relocation allowances; 82.5 per cent had no provision for notice of layoff; and 83.8 per cent had no provision for labour management committees.

This emerging picture does not augur well for women. More than 90 per cent of all employees in Canada, including women, come under provincial jurisdiction, and most of the agreements surveyed by Labour Canada relate to establishments governed by provincial legislation.

Although a few provincial labour legislations contain some provisions related to technological change, they do not provide satisfactory measures since they apply only to *organized* workers, as in the case of the federal legislation.

As for administrative policy, the workplace adjustment policy of the Treasury Board contains provision for three to six months' training for employment. This policy is not specifically aimed at managing technological change, and according to a spokesperson for the Board, "managers are not using the provision as much as anticipated." He added that "a guide for managers is coming out in about a month."

While the newly elected government proclaims "happy days are here again," women in the federal public service remain concentrated in low-paying, dead-end jobs. Whereas women have a meagre share (5.9 per cent) of the plum senior executive jobs, they have a lion's share of the jobs in the administrative-support category. The 1983 Annual Report of the Public Service Commission shows that close to 82 per cent of all women are in that category – that is, at the bottom of the pyramid. If one considers that the central agencies – that is, the Treasury Board and the Public Service Commission – are supposed to set a good example and set the pace of progress, one is bound to be ever-so-slightly sceptical. The following figures are amply instructive (see table below).

I have intentionally added three departments and agencies: the Privy Council because it is near the "apex of power"; the Secretary of State because its minister is also responsible for the Status of Women; and Employment and Immigration Canada because its Minister is responsible for many training and employment-related programs for women and is in a super position to exercise power of example.

This is the background against which one must consider the reality that the productivity improvement drive is real and is here to stay. New technologies are, and will continue to be, brought in to secure productivity gains. No matter how much is said about enhancing management productivity, the trends show that the primary focus will continue to be on general office productivity – and women remain at the

	Senior management positions			Administrative-support positions		
	Held by women		Total number of positions	Held by women		Total number of positions
	Number	Per cent		Number	Per cent	
Treasury Board	28	15.8	177	172	84.3	204
Public Service Commission	11	17.5	63	676	87.9	769
Privy Council Office	19	31.7	60	145	75.5	192
Secretary of State	6	11.8	51	952	89.6	1,062
Employment and Immigration Canada	14	7.1	197	10,238	83.4	12,280

forefront of the productivity drive because they are the principal employees who capture, input, process, retrieve, and store the information and data needed by senior executives for their "critical decisions."

What should be done in terms of policy to ensure that women are not the recipients of disproportionate disadvantages stemming from the technology-based productivity drive? I have two main recommendations.

First, every department and agency should be required to establish a permanent committee to monitor the planning and implementation of a technological change policy. This committee should be comprised of representatives of employees and management. The primary responsibility of this committee should be to ensure that: (1) the policy of a given establishment for electronic equipment is consistent with the letters, intent, and spirit of the Canadian Charter of Rights – more particularly, the equality clause; and (2) the plan of implementation has all the elements to prevent disproportionate effects on women.

More specifically, attention to the following is necesssary:

– A capital expenditure plan for the acquisition of new technology must have a budget earmarked for employees' adjustment to the demands of new technology.

– Changes must be scrutinized very closely – that is, those that may have some effect on skills, responsibilities, educational requirements, and the conditions under which work is performed. This is when the possibility of an upward/downward move in financial compensation may occur, and where the principle of equal pay for work of equal value can come into play.

– The committee should get at least six months' advance notice. Any decent planning requires at least that long to be of any use.

– Technological change should be defined in the broadest possible manner so as to include any change in procedure related to technology.

– Strong and progressive hiring, training, and promotional policies should be instituted to help ensure that women are not disproportionately disadvantaged by technological change.

– The committee should secure appropriate opportunities for upgrading women's educational qualifications, where necessary, for admission to training and retraining programs and for entry into apprenticeship programs.

– New and innovative work and training schedules should be established to make certain that women are not disadvantaged either in the workplace or in training programs because of their family responsibilities.

– "Bridging" positions should be created to assist women in administrative-support jobs to make a smooth transition to positions offering greater scope for occupational mobility and career advancement.

– Information and education programs should be executed so that employees fully understand the goals and objectives of the technological policy, and how they can take part.

– Necessary steps should be taken to eliminate all possibilities of creating glorified assembly lines made up of employees operating data/word processing equipment (this can create yet another ghetto for women, "steel-collar ghetto"). Operators of such equipment should not be isolated from the mainstream of life at work. History reminds us that as soon as some work becomes "women's work," the monetary value assigned to it comes tumbling down.

– Jobs should be enriched; robotization of people should at all cost be prevented. Canada is a signatory to the principles of the International Standards Organization that call for variety at work. In addition, Canada is a signatory to the international instruments coming out of the International Labour Office and the World Health Organization, both of which call for workers' well-being. Well-being requires the absence of negative stress that often results from the accelerated pace and monotony of work. Operators of computer-based electronic machines should not be required to work on the equipment all of their work time. Work must be organized in such a manner that half of the time is spent on the machines and the other half on learning other skills enabling transition into other jobs if, of course, the workers so desire. A ceiling on the number of hours spent on these machines is possible, as shown by Norway, Sweden, West Germany, Switzerland, and Australia, among some countries in the world, and some collective agreements in Canada.

– Provisions must be made to enable workers, who for some reason or another may be incapable of adjusting to new technology, to be transferred to comparable positions without any loss in compensation, benefits, seniority, etc.

– Electronic monitoring of work performance should be prohibited, as well as any abuse of personal information that is collected and maintained by means of electronic equipment.

– Public Works Canada should be encouraged to develop real expertise in the designing of contemporary workstations, based on flexibility and adjustability, that are appropriate for the requirements of the twenty-first century.

– The Canadian Centre for Occupational Safety and Health should be called upon to share its expertise on ergonomic considerations of the electronic office.

– Labour Canada should be *required* to monitor the work environment *regularly* for noise, heat, air quality, and any agent that may have a negative effect on the work environment and the well-being of employees, particularly when the work environment is influenced by a panoply of electronic equipment. (Today's managers seem to be constantly chanting "excellence.") Little attention is paid to studies that show that the poor quality of the work environment can have a negative influence on work performance. This aspect should receive very careful attention so that if employees' (mainly women) performance on computer-based electronic equipment show a downward trend because of the poor quality of their work environment, they should not be penalized in the form of poor evaluation and, as a result, suffer the loss of an increase in remuneration. The responsibility of maintaining workers' full well-being on the job is the responsibility of management.

– A demonstration project accessible to the public should be considered to track, over time, the relationship between new technology, quality of work environment, and quality of work performance.

My second main recommendation is that the Canada Labour Code (Part III) should be amended to provide some decent measures to the vast majority of women who are not members of unions and thus cannot benefit from collective bargaining – an important avenue of workplace reform. Such an amendment would assist unorganized women so that they can adjust to the introduction of new technologies in establishments under federal jurisdiction without disporportionate negative impact.

Historical materials related to technological change indicate that the employment/unemployment debate over the new and emerging technologies will continue; conclusive answers in neat packages are not possible. Action needs to be taken in an anticipatory mode, in keeping with the contingency plans most contemporary establishments are expected to have in place in today's complex world.

Dr. Peitchinis made the following statement to the Royal Commission on the Economic Prospects for Canada:

> A retrospective examination of the state of our existence will establish that adjustment to revolutionary changes in technology has been reasonably successful. The mechanization process and the resultant mass exodus of people from farms, mines, forests, and from the multitude of activities that provided them with services did not result in the levels and degrees of unemployment, poverty and slums that are being experienced by countries such as Mexico and Brazil, for example.
>
> The destructions were preceded or were accompanied by countervailing job creations, and the people were able to respond effectively to the requirements of emerging alternative opportunities. (Theme Day: Technology, Productivity, and Work.)

The problem today is that the economy is not buoyant; the short- and long-term forecasts are riddled with contradicting opinions from economists representing different think-tanks, government advisory agencies, and private consultants. Therefore, ordinary, "real people" feel apprehensive, and this is why contingency planning through legislation is necessary to prevent an unfair, negative impact on women.

Judge Rosalie Abella's report released last week confirms once again that Canadian women continue to experience obstacles in the labour market. Life-liberating technologies should facilitate women's improved participation in employment, not the other way around.

Dorothy Walters

My position in this panel discussion takes as its starting point a caution given by Professor Peitchinis in the concluding comment of his chapter, that there is a critical difference between the factors and policies that affect the core infrastructure of the economy and those factors and policies that affect the core by changing it at the margin. I want to look at the total core, asking how technology will change both incremental and basic employment opportunities for women, and then go on to consider other variables that affect the dynamics of employment, including the employment of women.

Let me sum up my thesis. There is a considerable consensus that the emerging technologies will, over time, dramatically affect the quality and availability of jobs for women in their traditional occupations and industries. On the other hand – and there is no consensus here – during the process of change and adjustment, technology is unlikely to create enough jobs for displaced women workers and new entrants into the female labour force. Finally, other changes in the economy and in the labour market will limit significant gains for women. On balance, and in the medium term, women will suffer more employment dislocation than men.[38]

The Female Labour Force

Demographic data indicate that the source population, and by inference the labour force, will increase much more slowly to the end of this century than it did in the previous two decades. As we have already heard, it is not possible to estimate with any precision how the female labour force will grow over this period. While everyone who could enter the job market between now and the end of the century is already alive, the variables affecting the rate at which women decide to go out and look for work are too complex to forecast with any certainty.

The scenario of the future implicit in this analysis assumes slow growth, high unemployment, and structural dislocations for the balance of this century. In this environment, the female participation rate will continue to rise, although less rapidly than in past decades. Recent economic and income pressures on the family, on single parents, and on older women will persist. Married women will increasingly go to work to take up some of the slack in earnings as their husbands face retraining or unemployment, either temporary or long-term. Other women will work to achieve or maintain the advantages of a two-income family. A rising number of divorced, separated, and widowed women will also be trying to establish the independence of employment. These and demographic factors will result in a relative increase in mature women in the labour force compared with new entrants from school and raise the ratio of females to males in the workforce.

Where will women be employed, and what will be the role of technology?

Technology

Technological change is not new, and the uncertainty, even fear, that it generates is not new either. Attempts to unravel the source of growth over past decades suggest that technology has been a major factor contributing to rising productivity, real income, and consumption levels for nations and individuals. Job creation was an integral part of that complex process. On balance, and in spite of general and particular problems, technological change has been a boon.

There are, however, those who see a qualitative difference in recent technological developments – a difference that defines past changes as primarily mechanical or physical and current changes as intelligent or mental. If this distinction is valid and if the character of new technological change will shape a future unlike the past, it raises some critical questions. What, in this new environment, will be the scope and pattern of job creation and job loss in individual occupations and industries, and in the economy as a whole?

In the past few years, there has been a great deal of emphasis on the creation of specialized high-tech jobs. This is an important development, but it is equally important to set its potential in some sort of quantitative perspective. A recent study of the impact of the new technology on jobs[39] suggests that top high-tech occupations represent only a fraction – less than 3 per cent – of total employment in the United States. By the mid-1990s, this group is forecast to make up only 5 to 6 per cent of national employment. It is unlikely that Canada has, or will have, as large a share of employment in high-tech jobs as the United States.

Using the broadest reasonable definition, high-technology industries – as opposed to occupations – employ less than 15 per cent of the U.S. workforce. Growth in this sector will involve a good many new jobs, but most of them will be in nonprofessional occupations, such as secretarial and clerical, or manufacturing and assembly. In the U.S. electronic component industry, for example, only 15 per cent of workers were in engineering science and high-tech computer occupations; most workers, however, were in low-skill and low-pay assembly jobs.

High-tech industries and occupations are important for a variety of reasons, but they will not make a significant contribution to the creation of jobs for workers of either sex. Given the educational profile of women, they will not participate equally in the opportunities that do develop.

In 1981 over one million Canadian women were in professional, managerial, and technical occupations, including almost three-quarters of a million in teaching and medical professions. In recent years, women have made some significant progress into top male-dominated occupations, but within this professional group women are still found primarily at lower-income, lower-status levels.

Women will continue to move into the occupational and income elites, although it is not clear how rapid their entry and progress up the ladder will be. Higher enrolment ratios for women in postsecondary education and a significant body of underutilized talent already in the labour market suggest that the supply of educated women is rising. What about demand?

Professional unemployment is high, and women face continuing competition from experienced men. Many companies and institutions are moving to restructure and rationalize their operations. In this situation, the retraining and reassignment of the existing and predominantly male workforce will block the entry of professional women into new opportunities in existing structures. There is still a bias that runs from prejudice about women in top jobs to covert and not-so-covert discrimination. As Senator Marsden indicated in her comments, without some dramatic change in societal attitudes and power relationships, the door to senior positions for women in industry and other bureaucracies will not swing open. Evidence suggests that the rate of growth of employment in governments and the rest of the public sector is slowing. Professional women, for whom the federal government in particular has provided something approaching equal access, will find entry more difficult.

For highly educated women, the issue of increased opportunities for, and in, employment has real and symbolic value. Nevertheless, high-tech and other elite occupations do not, and will not, represent a significant fraction of the female labour force. The core is elsewhere.

The majority of women, about two-thirds, are employed in clerical, sales, and other service occupations. How will the application of new technologies affect them? Even a cursory look at the kinds of changes that are in train can identify some winners and losers among individual occupations and industries. We can already see a relative decline in occupations such as secretaries, sales workers, office machine workers (other than computer), cashiers, tellers, phone operators, and clerical workers in all industries.

Office automation and electronic systems involving the storage, manipulation, and transfer of information will be a major source of traditional job loss. The impact of this trend, which is already in process, will change and intensify as systems increase in versatility, become more user-friendly and intelligent, and as their cost declines. It should perhaps also be noted that computers and other control equipment are becoming smarter; in this process the skills required for operatives will decline with some downgrading of jobs and earnings.

The office revolution is affecting all industries including manufacturing, resource industries, governments, and nonprofit institutions and organizations. It is, and will continue to be, associated with declining opportunities for women, particularly in service industries. This group, one of the fastest growing sectors, includes banking, insurance, real estate, hotels, and leisure services. Women have traditionally played a large role in these industries and occupations, but declines are already visible. On the other hand, two service industries, health and education, are expected to expand significantly with the use of the computer as a teaching tool and in the recording, diagnosis, and analysis of health states.

As noted earlier, the most obvious positive change in employment opportunities will be in industries and activities involved in the design, production, sale, distribution, installation and servicing of computers, microprocessor-based machines, robots, and other numerically controlled equipment. These and related industries could provide a major focus for employment growth, but there is no evidence that women will benefit especially.

The rate at which technological change is adopted, particularly in manufacturing and resource industries, depends on many factors. A major determinant is the growth of overall demand, which bears directly on the need or opportunity to expand output and the availability of investment finance. In some cases, the pressure of foreign competition may result in a modernization of production facilities. Traditional jobs for women in industries such as textiles, apparel, leather goods, and footwear are likely to be affected in major ways. Industries like textiles, which are struggling for survival in a fiercely competitive world, have the need but, by and large, lack the resources. In this situation government policies and union attitudes will help to decide the outcome. Whether such industries survive or fall by the wayside, one could expect a relative, if not an absolute, decline in employment for women.

We do not know and cannot predict the prospective rate of innovation in large or small industries. Companies, government policy, unions, and education, as well as the state of the economy, all play a role. Many companies are just beginning to move into profitability, but investment is still below pre-recession levels. Prospects for growth do not provide an incentive to invest. The new federal government has expressed concern for the slow rate of innovation in Canada and suggested that it will, at some point, introduce policies to stimulate research and development into process technology. Unions currently seem to be going into negotiations with the protection of jobs and incomes as the primary goal. As technology and structural unemployment alter the character of the work world, all labour market participants should be looking for new policies that will meet the work and income needs of all workers and facilitate change into this emerging environment. The rate of technological innovation could also be affected by the supply of skilled workers. There are serious concerns in Canada that the educational system may not yet be ready to meet the new challenge. At this point it seems likely that Canada will move relatively slowly into the new technologies. There will of course be different paces; the growers and movers will proceed quickly, others will lag.

But there can be no rejoicing about a lagging rate of technological innovation. In recent years, much has been written about the need for an economic or industrial transformation in Canada. A postrecession unemployment level of 1.25 million, of which some 600,000 are women, is the most obvious and costly evidence of poor economic performance. There is a widely held view that there will not be any significant reduction in unemployment next year or even in 1986. In fact, analysts looking into the medium term suggest that economic growth will not be strong enough to reduce unemployment to anything close to an acceptable level before the end of this decade. Meeting the work and income needs of Canadians, women and men, will take a new approach to policy. Such an approach requires a break with past concepts and models – a break that allows for a new future-oriented view of employment, work, leisure, and income distribution.

But unemployment is only a symptom. Economic growth, a prime source of new job creation, has been undermined by poor performance – slow productivity growth with high cost and price inflation. Technological innovation is a major part of the solution to this problem, but, as we have seen, there will be employment reductions and realignments in many occupations and industries. Not only will women be affected, there is some reason to think that they will be affected first and most.

Nevertheless, it is not possible, or even desirable, to go back. The answer does not lie in defensiveness against change, but in a willingness to admit that structural reform and technological advance are imperative. The traditional view of the economic system has sustained the myth that the primary policy problems were cyclical, short-term, and temporary, and inhibited the changes in attitude and policy that are crucial to the resolution of current and future problems. There is a need for a new intellectual framework – one that can break away from a conceptual mould that ties the future to the past.

Since working women – less experienced, less educated, less mobile, less financially viable – are likely to bear a disproportionate share of the negative effects of future change in labour markets, they have a special interest in trying to anticipate such changes and to minimize their impact.

Some Policy Conclusions

– Given the importance of economic conditions for the employment of women as well as men, public policies are needed to stimulate growth (not just job creation) and improve economic performance.

– The costs and benefits of special policies for women should be evaluated; this must be done in the context not only of the impact on women workers but on the economy and society as a whole.

– Organizations mandated to improve the conditions of women should give more attention to the needs and problems of the 90 per cent of women who are not elites – not highly educated or skilled. Many working women do not see their interests being served by such organizations. Forces tending to widen the gap between these two groups must be resisted.

– Working women should not stand still and see their share of jobs diminish through technological change; they must insist on retraining as part of the adjustment process. This is a responsibility of women's groups and unions.

– The use of new technology in work-at-home projects for women should be explored; concerns about exploitation must be addressed, but it should not be assumed that the new technologies have nothing constructive to offer women working at home.

– The negative impact of course patterns and content on the education and socialization of women was discussed earlier, and there was a suggestion that all boys and girls should receive identical education. There are two important points in that connection. First, the kind of education needed to follow on to postsecondary school is not the same as that needed by prospective wives and mothers who may come into the labour force later or part-time. Second, it is not clear from neurological evidence that male and female minds are identical; if they are not, pressures for identical course content may not provide the kind of flexibility that will optimize the potential of all women.

– Governments should be pressed to develop policies that would provide more equitable distribution of paid employment using shorter hours, special leave, and early retirement, with reduced – that is, more equitably shared – earnings.

– Governments should be pressed to develop programs that would employ workers at nominal income levels in socially valuable programs such as child care or environmental protection.

– The system of transfer payments to individuals has become infinitely complicated and is not meeting the needs of the poor, many of whom are women; a basic annual income would be more equitable and efficient.

Floor Discussion

An issue generating considerable interest throughout the discussion concerned the recent development of "electronic cottage industries," whereby work on electronic equipment is done from the home rather than the office. In answer to a query on how this new concept affects women, Senator Marsden replied that men in this field apparently tend to be involved in high-level work, such as program analysis, whereas women usually work at lower levels, on word processing and data entry. Ms. Ray warned that women combining this kind of home work with the care of children (usually from necessity) are easily exploited, particularly since no provincial legislation exists to protect their interests.

A participant provided additional information on the dangers this new activity presents to women. Evidence from the United States, she said, indicates that employers are transferring routine work to people in the home for a variety of unscrupulous reasons. First, by contracting out piece-work in this fashion, they avoid paying regular wages and fringe benefits; second, they are able to transfer many overhead costs to the employee; and, third, they thereby hinder the formation of unions, since these employees have less chance to organize.

Mr. McCambly noted at this juncture that he saw an important role for unions in protecting women in cottage industries, to prevent the kind of exploitation that took place in the textile industry. A move to organize must begin immediately, he said.

Ms. Walters shared the opinion that measures should be taken to ensure fair practice, adding that it would be unrealistic to attempt to abolish cottage industries altogether. Professor Peitchinis, however, was not certain of the permanency of this trend to dispersion. He noted its resemblance to the early stages of the Industrial Revolution, when numerous small shops appeared. That phase was followed by one of centralization in factories and, finally, industries, he pointed out. Whether we can expect the same sequence today depends on how industries react, he added.

In another comment on this subject, Professor Peitchinis said that the household unit may be in the process of becoming a production, rather than a consumption, unit – leading Senator Marsden to remark that the household has always carried out this function, except, possibly, in the minds of economists! In that connection, one participant drew attention to a new field in economics, concerned with studying the household as a production unit.

In other discussion, Professor Peitchinis's suggestion that technological change is a neutral force was disputed by one participant, who argued that according to recent European research, the impact of new technology on an organization depends to a great extent on that body's structure and management. Professor Peitchinis concurred, noting that research conducted by the European Economic Community on the effect of microelectronic technology on the same industries in different countries found that the rate of substitution of technology for labour is primarily determined by management policy. For that reason, he said, womens' progress in an organization will depend on their participation in the decision-making process at the work-function level.

With regard to the specific impact of new technology on jobs, Mr. Paradis noted that extensive automatization at the branch level in banking had not resulted in significant employee layoffs.

In conclusion, another participant – commenting not simply on the subject of technological change, but on the Colloquium generally – noted that the pleasant combination of professional expertise and homespun example, characterizing both presentations and discussions, confirmed her view that women have a significant contribution to make to the policy process.

9 Equality in Employment

Banquet Address by
Rosalie S. Abella

According to 1982 data, about 52 per cent of Canadian women are in the paid labour force. They constitute 41 per cent of the workforce. Year after year, women make the case for better child-care facilities, equal pay for work of equal value, equitable benefits, equal employment opportunities, unbiased educational options, and an end to job segregation. Year after year, they are told by governments that measures are being looked into and solutions being devised. Every year, progress is largely chimerical. The lack of progress results in a perpetuation of losses that become increasingly irreversible.

Many women from whom the Royal Commission on Equality heard were incredulous about their having been effectively excluded from so many opportunities over so long a period of time. Moreover, they resent the attribution of stridency when, in their frustration, they reiterate with vigour how intolerable is the failure of society as a whole, governments in general, and institutions and individuals in particular to treat women as equals.

One of the major impediments to women having adequate employment opportunities, articulated by both women and employers, has to do with the education choices made by females. If these choices are based on an assumption by females that they need not seek paid employment, that their economic security will flow from a marriage, then clearly they will not address the issue of which educational options will provide them with better employment skills. Where they are interested, and most are, in seeking employment, they must participate in the full range of available educational opportunities. This will require dramatic changes in the school system.

For women interested in joining or rejoining the workforce later in life, training and educational opportunities must be made available so that they have a chance to work at the widest range of jobs. Nor should they be neglected in the wake of technological change. Every effort must be made to attempt to break the mould that results in job and economic segregation.

What precedes employment may be just as important as what occurs once employment is obtained. The cultural ambience from which men and women emerge affects what takes place in the workplace. How men and women perceive one another as spouses and how children perceive their parents both determine what happens to women in the workforce. If women are considered economic and social dependants in the home, they will continue to be treated as subservient in the workforce. If, on the other hand, they are perceived as social and economic equals in a partnership in the home, this will be translated into the practices of the workplace. Two issues must therefore be addressed simultaneously: the way women are perceived generally in society; and the employment practices that affect women in any given corporation.

The problem is one of assumptions, almost religiously held, about the role and ability of women in Canada. Many men and women seem unable to escape from the perceptual fallout of the tradition that expects women to behave dependently and supportively towards men.

The historic and legally sanctioned role of women in Canada has been as homemaker. For more than a century, in every province, the legal doctrines around marriage required that the legal personae of the husband and wife merge into that of the husband. This obliterated the wife's identity as an independent legal entity. It also required, rather than permitted, the husband to be the breadwinner, resulting in the allocation of the homemaking function to the wife.

Only in the recent past have provinces begun to impose an equal obligation on husband and wife to be responsible for their own support. The right of one spouse to support from the other now flows mainly from economic need arising from the spousal relationship and its division of labour rather than from gender. Marriage is to be considered a partnership of social and economic equals, and the division of labour in marriage between breadwinner and homemaker is to be considered a division of two equally valuable contributions to this partnership.

Notwithstanding the existence of this legal requirement that no one gender should expect the other automatically to provide financial support, child care, or household services, it will likely be generations before the impact of this newly sanctioned approach to marriage is reflected in society's other institutions. Nevertheless, it immediately requires courts to consider that although one spouse, usually the wife, remains at home, the homemaking contribution is to be considered equally valuable to the spousal relationship whether or not its efforts generate income. There is no longer an automatic division of household responsibilities based on gender in spousal relationships. The responsibilities of economic self-sufficiency and parenting are bilateral.

At the same time, it would be wrong to undervalue the role of homemaking and to ignore its economic contribution simply because it is not "employment" as it has been traditionally defined. Homemakers, who have made choices authorized by law and justified by their own spousal relationships, should not be penalized economically because the majority of women are now making different choices.

The essence of equality for women, now and in the future, is that in their options, which may or may not include the selection of a "traditional" role, they face no greater economic liability than would a man, and that in whatever "employment" environment they choose, they receive the same benefit for their contribution as would a man. Particular efforts must be made to provide the necessary human and financial supports to those women who, in the absence of a spouse's household assistance, hold two full-time jobs: one in the paid labour force and one unpaid as the spouse with the primary responsibility for homemaking functions.

A number of harmful consequences to women of traditional stereotypical assumptions must be addressed. The first involves an approach to the family that treats it as a single indivisible unit for policy purposes.[1] The family as a unit performs a private function for its individual members in providing intersecting emotional, social, and often financial services. As a carapace from external circumstances, it can be a source of comfort and protection. But beyond this sweeping and idealized generalization, it is a mistake to presume that there is a standardized social or economic formula governing the way families operate. The mistake tends to work to the detriment of both women and men, who are categorized as playing assigned roles.

Although women have the same right to work and stay home as do men, until the legal directive in modern family law that each spouse is responsible for his or her own support takes root and routinely inspires in young girls and women the realization that they themselves, no less than any future spouse, must be financially self-reliant, women will likely be the gender performing the homemaking responsibilities.

In 1982, there were more than 70,000 divorces granted in Canada; about one in every three marriages now ends in divorce.[2] Census figures show that the number of single-parent families increased from 477,525 in 1971 to 714,005 in 1981. Eighty-five per cent of single-parent families in 1981 were headed by a woman, and Statistics Canada data show that three out of five female-headed families were living below the poverty line.[3] Women who have functioned primarily as homemakers may suffer enormously heavy economic penalties when their marriages unravel, and they should be assisted in the form of tax and pension measures as well as enforceable maintenance and support systems to help them resist poverty and achieve financial viability. When they apply for jobs, their homemaking and volunteer work should be considered legitimate work experience. If they work part-time, they should not bear the unfair financial brunt of a perception that part-time work is not serious work. They should be remunerated and receive benefits on a prorated basis with workers employed full-time.[4]

But for all women, whether they work at home or in the paid labour force, it is crucial that they not be deemed for policy purposes as economic satellites of their partners. Tax laws, pension schemes, the public perception of parental responsibilities – all these need to be examined, and in some cases drastically revised, to confirm for women their status as independent individuals, to negate the perception of their dependency, and to discredit the assumption that they have a different range of options than men have.

Notwithstanding that there is an equal right to work, there is no avoiding certain biological imperatives. Women rather than men become pregnant. Children require care. An environment must therefore be created that permits the adequate care of children while also allowing the equal right of men and women to maximize their economic potential. This environment, however, is not possible if the public continues to assume that the primary responsibility for the care of children belongs to women. There is no mysterious chemistry that produces in one gender an enhanced ability either to raise children or to work at a paid job.

The care of children needs to be seen as a parental, rather than a maternal, responsibility. We are unfairly overburdening and restricting both men and women if we fail to base practices, employment and otherwise, on a policy of shared responsibility between men and women for the care of their children.

For women who are mothers, a major barrier to equality in the workplace is the absence of affordable child care of adequate quality. The urgency and unanimity of the submissions made by women in all groups on this issue impel this Commission to give it special attention.

The demand and the need for remedial measures derive from the increasing number of mothers in the workforce. Their children need adequate care. By Canadian law both parents have a duty to care for their children, but by custom this responsibility has consistently fallen to the mother. It is the mother, therefore, who bears any guilt or social disapprobation for joining the workforce. And it is the mother who normally bears the psychological and actual responsibility for making child care arrangements.

It is time to set aside the emotional tangents of this issue and confront it directly. Women work. They have the same right to work as do men.[5] Thus, many parents must take advantage of whatever child care happens to be available,[6] however uneven in quality. Some parents undoubtedly manage to find adequate care for their children; others do not.

There are those who argue[7] that the need for child care is not demonstrable; otherwise more women would be staying home. The absence of adequate child care, they claim, does not seem to be inhibiting women from participation in the workforce. This is simply untrue. Women are not only inhibited from working by the absence of this support system, but the quality of their participation is impaired. Child care is the ramp that provides equal access to the workforce for mothers.

There is a consideration that is of even more importance. Ignoring the paucity of child care ignores the real beneficiaries of child care – children. Studies show that children are not only unharmed by quality child care, some children benefit greatly.[8] To provide quality child care is to address their needs, and only secondarily to satisfy the needs of their parents.

"Daycare" tends to be associated with "women's rights" issues and is therefore subject to the sophistry of those who advocate that all women have a duty to stay home during the early years of their children's lives. As one writer observed: "Because the issue of daycare for pre-school children is discussed predominantly in relation to the mother's employment, the use of such an ideological justification for restricting daycare facilities serves to confirm the view that women's attachment to the labour market is, and should be, of secondary importance only. This is particularly useful in times of high unemployment."[9]

The term "child care," on the other hand, states the issue exactly. It suggests a system intended to care for children whenever the absence of the parent(s) requires an alternative form of care. The issue can be seen to flow as part of a syllogism:

- Society has a duty to ensure that dependent children receive at least minimal standards of care;
- Parents have the primary responsibility for this care;
- Parents may not be able to give this care on a full-time basis;
- Therefore care must be provided by society for children when their parents are unable to provide it.

There is no doubt that children should – and do – look to parents for the provision of primary care and the necessities. This parental primacy, a central tenet of our society, would not be threatened by the general availability of child care.

In education, for example, the state intervenes whether or not there are primary caretakers to provide instruction to children. The existence of a universally accessible system of education is in no way meant to, nor does it, threaten the primacy of parents over the care of their children. It is, rather, a supplementary, albeit pervasive, system to assist in the provision to children of the skills necessary to function adequately as adults in society.

Many of the arguments made today against the introduction of universally accessible, quality child care are identical to those made in the nineteenth century before universally accessible public school education was introduced.[10] The threat to the primacy of the parents, the danger to the emotional stability of children in being removed from the home to spend hours in a classroom, the peril to the sanctity and cohesiveness of the family, and the enormous expense were all proffered as arguments against free public school education.

Child care is a logical extension of this philosophy. If education is the state's legitimate concern, and if standards of care for children are equally the state's concern, then the partnership of parent and state should start when a child is born and continue as long as the dependent child, as beneficiary, needs it, regardless of age, of whether he or she goes to school, or of whether there is a parent at home full-time.

Canada lags behind many other Western industrialized nations in its child care provisions. In France, for example, where only 44 per cent of mothers are employed outside the home, free, noncompulsory preschools are part of the regular school system, and 95 per cent of all French children aged 3 to 6 attend these schools.[11] In West Germany, 75 per cent of children attend full-day preschools; in Italy, the attendance rate is 67 per cent.[12] Either free or low-cost infant care is also available in other European countries, including Sweden. In most cases, the government takes full or partial responsibility for the provision of preschool child care.[13] Canada, in contrast, has licensed daycare spaces for less than 15 per cent of preschool-age children of working mothers.

It also appears from the available data that significantly more daycare is available in the United States than in Canada, though facilities fall short of requirements in both quantity and quality.[14] Financial arrangements vary widely, and most American children receive care in unlicensed facilities of unknown quality.[15]

The United Nations and the International Labour Organization have recognized that adequate child-care services are essential if women are to have equal access to employment.[16] The United Nations Convention on the Elimination of All Forms of Discrimination Against Women, which was ratified by Canada in 1981, requires that, "in order to prevent discrimination against women on the grounds of marriage or maternity and to ensure their effective right to work," countries take measures "to encourage the provision of the necessary supporting social services to enable parents to combine family obligations with work responsibilities and participation in public life, in particular through promoting the establishment and development of a network of child care facilities."[17]

From the perspective of the needs of children, who represent about one-quarter of Canada's population,[18] as well as those of parents, the ideal child-care system would be affordable, of acceptable quality, and universally accessible though noncompulsory. For many, this position requires a fundamental revision of their approach to the care and raising of children. For others, it is a truism remarkable only for the want of implementation.

From the child's perspective it matters little why the majority of mothers are working; but it is not without significance that many mothers do so purely as a result of economic pressures. The decline in the number of Canadian families below the poverty line between 1969 and 1980 has been attributed to the addition of a second worker in the family (women who work full-time contribute an average of 39 per cent of the family income).[19] A 1979 National Council of Welfare report, *Women and Poverty*, showed that if wives' incomes were deducted from family incomes, 51 per cent more two-parent families would have fallen below the poverty line.[20]

From the point of view of mothers, access to child care and the nature of such care limits employment options. "In balancing the responsibilities of family and career, women more frequently than men must make decisions (such as to withdraw from the labour force to care for young children) of consequence to their career."[21] According to a Labour Force Survey, about 121,000 working mothers had to leave or refuse a job in 1980 because of problems with child care arrangements.[22]

There is little doubt that a positive relationship exists between the availability of child care and women's participation in the labour force.[23] Various studies show that a major reason women are over-represented in part-time work is that they are combining child care responsibilities with jobs in the paid labour market.[24]

As a 1981 American study pointed out, "National statistics, collected and tabulated for the Bureau of Labor Statistics by the Bureau of the Census, show that a larger percentage of mothers with young children are employed part-time than are adult women in general."[25] The same study concluded that "lack of child care or inadequate child care keeps women in jobs for which they are over-qualified and prevents them from seeking or taking job promotions or the training necessary for advancement."[26]

Failure of corporations to accommodate in any significant way the fact that women become pregnant and have children is a source of deep concern to women. Employees of both genders leave jobs for a variety of reasons and for various periods of time. Young men often hopscotch from one job to another as they pursue upward corporate mobility and expand their career opportunities. This is such a common feature of the corporate community that very little comment is heard about whether the corporate investment of time and resources in these young men has been wasted. Yet a great deal of resentment is articulated by business over the loss, usually temporary and for a period of less than four months, of a female employee who has had a baby.

Many women find that their current or prospective status as a mother is a powerful factor on a hidden agenda affecting hiring and promotion practices. Some companies fear hiring young women who, though otherwise qualified, are potential childbearers. The prospect of maternity leave appears to inspire alarm in a way that training leaves, extended vacations, or even lengthy illnesses do not. This alarm is communicated throughout the female candidate pool and results in a form of psychological contraceptive blackmail. Women are often made to feel either that they should not have children or that, having had them and not wishing to offend the perception of career primacy, they should act as if they did not have them.

Employers should presume no more about what mothers can, should, or should not do, than they do about fathers. Employers must operate on the assumption that their male and female employees have the same family responsibilities. The classic corporate requirement of geographic mobility, for example, may be a burden to mothers seeking promotion, but it is probably also a burden to fathers who are called upon by companies with almost callous regularity to move from one community to another. It is ironic that only now are corporations beginning to re-examine this traditional career path, not because they have concluded that it is potentially harmful to the families of their employees, but because the men to whom these distant promotional opportunities are being offered are increasingly declining them out of consideration for a partner whose own career interests conflict with a change of residence.

Most women work in the clerical, sales, and support services of any corporation. These are not only the lowest-paying jobs, they also tend to be jobs limited in opportunities for promotion. Even where women perform managerial functions, as many secretaries do, they are not given credit for these responsibilities when candidates for promotion to management are sought. Nor do women get the same educational or training leaves in corporations for significant corporate policy task forces or committees. Women must train for, be hired in, and given opportunities for the full range of occupational categories in order to break out of the economically limiting job segregation they now experience. This means more than an occasional token appointment of a woman to a management position; it means the routine hiring of qualified women throughout the occupational layers of a workforce.

Their work, wherever they perform it, should be valued and remunerated no less differently than work done by men.

They should be encouraged to qualify and apply for the widest range of jobs and careers, but where they choose to work in jobs traditionally held by women they should not, by virtue of working in a predominantly female occupation, be paid less than is paid for work that is no more valuable but is done predominantly by men.

The current discussion surrounding equal-pay issues sometimes seems to suggest that the problem is not critical. But referring to a wage gap as "only" 10 per cent creates a tendency to minimize the problem and to treat it as having decreased to a tolerable level.

It has not. In 1911, the average wage of employed women in Canada was 53 per cent that of men.[27] In 1982, it ranged from 55 to 64 per cent.[28] This means an improvement of 2 to 11 percentage points over the course of 70 years. What is particularly noteworthy is, first, the length of time the gap has been tolerated and, second, that it is tolerated at all.

The average annual earnings for males working full-time, full-year in 1982 were $25,096. For women, they were $16,056, or 63.9 per cent of male incomes. The average annual earnings for males working full-time and part-time were $19,164. For women they were $10,472, or 54.6 per cent of male incomes.[29] Women earned significantly less than men in every occupational category. Even in the clerical category, a full-time female employee earned on average only 66.9 per cent of the wages earned by a full-time male employee.

When it is considered too that wages affect the amount of unemployment insurance benefits and usually retirement benefits, the problem is intensified.

In 1982, in families where the husband was the primary earner, the average combined earnings of husband and wife were $35,265. When the wife was the primary earner, the combined earnings were $28,716. When only the husband worked, the average earnings were $24,287, but when only the wife worked, they were $9,956. In 11.4 per cent of families, wives earned more than or an amount equivalent to that of their husbands.

The cost of the wage gap to women is staggering. And the sacrifice is not in aid of any demonstrably justifiable social goal. To argue, as some have, that we cannot afford the cost of equal pay to women is to imply that women somehow have a duty to be paid less until other financial priorities are accommodated. This reasoning is specious, and it is based on an unacceptable premise: the acceptance of arbitrary distinctions based on gender as a legitimate basis for imposing negative consequences, particularly when the economy is faltering.

If the argument had logic, let alone fairness, on its side, it would suggest that some redress has been available for women during times of economic strength. But the appeal to women as the economy's ordained shock absorbers was and is a spurious one. We would have witnessed fluctuating differences between male and female incomes over the years, depending on the clemency of the economic climate. There has been no such fluctuation.[30] The gap persists through good times and bad times. It persists in the face of society's commitment to justice. It persists in defiance of the law. In a sense, it matters little whether the earnings gap between genders is caused by blatant, subtle, or benign design. So long as it persists, it signals the need for investigation, continued monitoring, and redress.

The conclusion is inescapable: equal-pay legislation has had little impact on the earnings gap.[31] This result occurs partly because most equal-pay legislation is applicable only where both men and women are employed at the same or similar jobs in the same firm. It ignores the substantial number of women in segregated jobs or in businesses where there are few men or none with whom to compare salaries. A more important factor is that, as a concept, "equal pay for equal or similar work" fails to deal with the fundamental problem: the undervaluation of work done by women.

For women, it is vital that equal pay be seen through the "equal-value" lens. There are some jobs that have traditionally been held mainly by women and will probably continue so to be held. Despite a decade of equal opportunity programs, 62 per cent of women are still to be found in only three occupational categories – clerical, sales, and service. These are the same general categories into which they were segregated in 1901.[32]

Although every effort should be made to encourage women to diversify into jobs traditionally held by men, many women will still go on preferring clerical, service, and sales jobs – jobs characterized by lower levels of income, status, and mobility – rather than the occupations in which men are concentrated.[33]

In 1982, 50 per cent of women with full-time jobs earned less than $15,000 per year. Fewer than 22 per cent of men worked full-time for this amount or less.[34]

The argument has effectively been made that throughout society we undervalue and therefore underpay work done by women, and that this is a reflection of community expectations regarding male and female behaviour.[35] There is no disputing that sex-role stereotypes have affected labour market decisions, thus limiting women's options and expectations, and shaping their behaviour.[36]

But it matters little whether female-dominated jobs pay less because they are held by female workers[37] or because the jobs are undervalued by the company or marketplace.[38] The issue is whether job segregation should go on being permitted to justify income differentials that are inequitable. As one writer has observed: "If the crucial importance of women's jobs in our society suggests that these jobs are undervalued only because they are held by women, why should women be asked to change their choices, rather than asking society to change how it rewards those choices?"[39]

The alternative to exploring ways in which to close the wage gap is to leave the issue to the vagaries of the marketplace. Those who suggest that equal-pay and other economic issues for women be left to the awakening sensibilities of the marketplace either do not appreciate that the values of the marketplace may themselves be discriminatory[40] or do not care that they are. The marketplace is a convenient altar upon which many needs are sacrificed. The economically and strategically powerful elements in society have not in the past exhibited any great ability to isolate and address the discrimination women and minorities have experienced in employment, particularly when economic imperatives urged insensitivity. It is unreasonable to expect that this will change in any significant way unless the marketplace is directed by statute to concentrate on the problem.

At the heart of the problem is the perception of what mothers and women normally do – more accurately, what the majority of them used to do. Now, the majority no longer does. It is time to replace the fear and scepticism employers feel about whether women have the same commitment to their work as have men. They have. When this is understood and acted upon; when it is no longer a source of wonder that a woman has performed exceptionally well or a confirmation or prophetic hindsight when she has performed with mediocrity; when the appointment of a woman causes no more public or private anxiety over whether she is genuinely qualified than does the appointment of a man; when, for that matter, the appointment of a woman is so routinely accepted that the gender of the appointee is not even discussed; when aptitudes are accepted as accruing to particular individuals rather than to particular genders; then – and only then – will we have achieved a form of gender equality. Women have the same range of temperaments, characteristics, and abilities as do men; and society must stop pretending it is otherwise.

Unless concentrated attention is given to all of these issues, little will change. Human rights commissions must have the resources they need to fulfil their mandate; women must be encouraged by all political parties to play an equal and effective role both as candidates and as policy advisers; the media must become more self-conscious about how they portray issues they consider "female"; businesses must be made to examine their practices to identify and eliminate barriers facing women; and the public must be taught to stop thinking in terms of how a particular gender ought to behave and to start thinking in terms of equal options. Until all these initiatives are undertaken, women and men will be less than they could otherwise be.

To attempt to unravel the complex tapestries that hang as a background to discriminatory attitudes can be an unproductive exercise. It is undoubtedly of interest to know why certain attitudes or practices were allowed to predominate; but in devising remedies to redress patently unfair realities, sorting through the malevolent, benevolent, or pragmatic causes of these realities is of little assistance. One can assume that the unfair results would not have occurred without the nourishing environment of limited sensitivities. But as we have these sensitivities educated, we must concentrate not on the motives of the past but on the best way to rectify their impact. And one of those ways is to appeal to our collective sense of fairness.

Equality in employment means that no one is denied opportunities for reasons that have nothing to do with inherent ability. It means equal access free from arbitrary obstructions. Discrimination means that an arbitrary barrier stands between a person's ability and his or her opportunity to demonstrate it. If the access is genuinely available in a way that permits everyone who so wishes the opportunity to fully develop his or her potential, we have achieved a kind of equality. It is equality defined as equal freedom from discrimination.

Discrimination in this context means practices or attitudes that have, whether by design or impact, the effect of limiting an individual's or a group's right to the opportunities generally available because of attributed, rather than actual, characteristics. What is impeding the full development of the potential is not the individual's capacity but an external barrier that artificially inhibits growth.

It is not a question of whether this discrimination is motivated by an intentional desire to obstruct someone's potential, or whether it is the accidental byproduct of innocently motivated practices or systems. If the barrier is affecting certain groups in a disproportionately negative way, it is a signal that the practices that lead to this adverse impact may be discriminatory.

That is why it is important to look at the results of a system. In these results one may find evidence that barriers that are inequitable impede individual opportunity. These results are by no means conclusive evidence of inequity, but they are an effective signal that further examination is warranted to determine whether the disproportionately negative impact is in fact the result of inequitable practices, and therefore calls for remedial attention, or whether it is a reflection of a nondiscriminatory reality.

Equality in employment is not a concept that produces the same results for everyone. It is a concept that seeks to identify and remove, barrier by barrier, discriminatory disadvantages. Equality in employment is access to the fullest opportunity to exercise individual potential.

Sometimes equality means treating people the same, despite their differences, and sometimes it means treating them as equals by accommodating their differences.

Formerly, we thought that equality only meant sameness and that treating persons as equals meant treating everyone the same. We now know that to treat everyone the same way may be to offend the notion of equality. Ignoring differences may mean ignoring legitimate needs. It is not fair to use the differences between people as an excuse to exclude them arbitrarily from equitable participation. Equality means nothing if it does not mean that we are of equal worth regardless of differences in gender, race, ethnicity, or disability. The projected, mythical, and attributed meaning of these differences cannot be permitted to exclude full participation.

Ignoring differences and refusing to accommodate them is a denial of equal access and opportunity. It is discrimination.

Unless we reject arbitrary distinctions, women will remain unjustifiably in perpetual slow motion. The objectives of breathing life into the notion of equality are to rectify as quickly as possible the results of parochial perspectives that unfairly restrict women.

Neither, by itself, can education. Education has been the classic crutch upon which we lean in the hopes of coaxing change in prejudicial attitudes. But education is an unreliable agent, glacially slow in movement and impact, and often completely ineffective in the face of intractable views. It promises no immediate relief despite the immediacy of the injustice.

The traditional Human Rights Commission model, which valiantly signalled to the community that redress was available for individuals subjected to deliberate acts of discrimination, is increasingly under attack for its statutory inadequacy to respond to the magnitude of the problem. Resolving discrimination caused by malevolent intent on a case-by-case basis puts human rights commissions in the position of stamping out brush fires when the urgency is in the incendiary potential of the whole forest.

It is sometimes exceptionally difficult to determine whether or not someone intends to discriminate. This does not mean that there is no need for processes that provide remedies to individuals when intentional discrimination can be proven. On the contrary, the need is manifest, but these processes do not sufficiently address the complexity of the problem. There are those who are prejudiced in attitude but not in deed, and others who commit acts of flagrant discrimination out of obliviousness or misplaced benevolence. What we intend is sometimes far less relevant than the impact of our behaviour on others.

The impact of behaviour is the essence of "systemic discrimination." It suggests that the inexorable, cumulative effect, on individuals or groups, of behaviour that has an arbitrarily negative impact on them is more significant than whether the behaviour flows from insensitivity or intentional discrimination.

Systemic discrimination requires systemic remedies. Rather than approaching discrimination from the perspective of the single perpetrator and the single victim, the systemic approach acknowledges that by and large the systems and practices we customarily and often unwittingly adopt may have an unjustifiably negative effect on certain groups in society. The effect of the system on the individual or group, rather than its attitudinal sources, governs whether or not a remedy is justified.

Remedial measures of a systemic and systematic kind are the object of employment equity and affirmative action. They are meant to improve the situation for individuals who, by virtue of belonging to and being identified with a particular group, find themselves unfairly and adversely affected by certain systems or practices.

Systemic remedies are a response to patterns of discrimination that have two basic antecedents: (1) a disparately negative impact that flows from the structure of systems designed for a homogeneous constituency; and (2) a disparately negative impact that flows from practices based on stereotypical characteristics ascribed to an individual because of the characteristics ascribed to the group of which he or she is a member.

The former usually results in systems primarily designed for white able-bodied males; the latter usually results in practices based on white able-bodied males' perceptions of everyone else.

In both cases, the institutionalized systems and practices result in arbitrary and extensive exclusions for persons who, by reason of their group affiliation, are systematically denied a full opportunity to demonstrate their individual abilities.

Interventions to adjust the systems are thus both justified and essential. Whether they are called employment equity or affirmative action, their purpose is to open the competition to all who would have been eligible but for the existence of discrimination. The effect may be to end the hegemony of one group over the economic spoils, but the end of exclusivity is not reverse discrimination; it is the beginning of equality. The economic advancement of women is not the granting of a privilege or advantage to them; it is the removal of a bias in favour of the white males that has operated at the expense of other groups.[41]

Nor should we be ingenuous in believing that once access is expanded, the equal opportunity will translate into treatment as an equal. It is not enough merely to tantalize the excluded groups with the idea that the qualifying education and training by themselves will guarantee employment opportunities. Individuals must be assured that the metamorphosis includes equality not only of access to the opportunities but to the opportunities themselves for which their abilities qualify them. This is meaningful equality of opportunity.

Equality demands enforcement. It is not enough to be able to claim equal rights unless those rights are somehow enforceable. Unenforceable rights are no more satisfactory than unavailable ones.

This is where we rely on employment equity – to ensure access without discrimination both to the available opportunities and to the possibility of their realization.

This is not to suggest that no work needs to be done on encouraging women to review their own self-imposed inhibitions. But the encouragement and counselling of individuals to stretch their expectations is far more likely to produce the desired confidence if there is some hope on the part of these individuals that their expectations have a reasonable chance of fulfilment.

If we do not act positively to remove barriers, we wait indefinitely for them to be removed. This would mean that we are prepared in the interim to tolerate prejudice and discrimination. By not acting, we unfairly ignore how inherently invalid these exclusionary distinctions are, and we signal our acceptance as a society that stereotypical attributes assigned to women are appropriate justifications for their disproportionate disadvantages.

If they are not appropriate, and intrinsically they are not, we have an obligation as a society to remedy this inequity. It is in the act of remedying the inequity that we show our commitment to equality. In this sense, inactivity, however it is translated into defensive public or private rhetoric, is an acceptance of inequality. No exigency, economic or political, can justify the knowing perpetuation of inequality in Canada. If we fail to rectify it, we guarantee its survival.

It is probable that absolute equality is unattainable. But even if it is, no civilized society worthy of the description can afford not to struggle for its achievement. We may not be able to achieve absolute equality, but we can certainly reduce inequality.

Canada's economy has been faltering for some time. The country's unemployment rate, at 11.2 per cent in August 1984, is expected to hover around this mark throughout the balance of the decade.[42]

Full employment is desirable from every conceivable standpoint.[43] In particular we are all aware of the advantages full employment would bring to the furtherance of its objectives. The fewer the jobs, obviously, the keener the competition, and the less probability of a generous and open-minded reception for proposals that the rules of the competition be changed. But the fact that the economy is anaemic does not justify a listless response to discrimination.

Women represent about 52 per cent of Canada's total population. They have a right, whatever the economic conditions, to compete equally for their fair share of employment opportunities. As it is, the recession has only intensified their long penalization in the form of undertraining, underemployment, underpayment, and outright exclusion from the labour force.

The competition for jobs must be made an impartial one, open to all who are qualified or qualifiable regardless of gender, ethnicity, race, or disability. It is hard to imagine a valid excuse for postponement, given our avowed ideals and the commitments entrenched in the Canadian Charter of Rights and Freedoms. As for awaiting better times, the economic millennium may be further away than anyone comfortably projects.

The pursuit of employment equity policies that permit everyone who so wishes access to the realization of his or her full employment potential is not one that ought to be tied to an economic divining rod. The most positive way to prevent further irreversible human and financial costs to women from accumulating is to impose employment equity. Under Section 15 of the Charter, it is permissible and, while it is not the whole solution, it is a major step.

Section 15 in the Canadian Charter of Rights and Freedoms cancels the debate over whether the country's economic conditions should be permitted to dictate the timing of the implementation of equality. The time to proceed to achieve it is now.

It matters frankly little what methodology we adopt to confront the problem for all women. No one remedy is necessarily the correct one and in the months and years ahead the pros and cons of a variety of enforcement mechanisms will likely be debated – vociferously and viscerally. What we should never lose sight of in the debate, whatever ideological sources our ideas flow from, is that there is a problem, that it is a serious one, and that it demands redress. How we achieve it is far less critical than whether we achieve it. We owe it both to our ancestors and descendants, of both genders, not to get bogged down in semantic warfare and to get on with solving the problem. We must seek solutions and hope that no more Commissions on Equality will ever again be necessary.

10 Directions for Future Research

Panel Discussion

Walter Block

There are many Canadians who now support equal-pay legislation.[1] As one indication of the popularity of this idea, the three major political parties in this nation seem to have adopted for themselves several of the major planks of this program.[2]

But there are problems. If legislation incorporating equal pay for equal work and equal pay for work of equal value is enacted, the present (mainly) marketplace determination of wages will inevitably tend to be replaced by the arbitrary edicts of civil servants, bureaucrats, consultants, judges, and/or human rights boards.[3] In contrast, one of the important functions of wages in the market system is to allocate labour to its most needed and productive locations. If this process is short-circuited by equal-pay-for-equal-work and equal-pay-for-work-of-equal-value legislation, then labour mobility to that extent will be reduced.[4] But it is important that workers locate themselves in accord with changing consumer demands. Unless they can be induced to act in this manner by market signals in the form of wage changes, the flexibility of the economy will be diminished.[5] As well, equal-pay enactments function so as to "protect male jobs from low-wage female competition."[6]

Things would be bad enough if equal pay for equal work and equal pay for work of equal value were required to right wrongs now existing in the labour market. Then, we would have to face a tradeoff between the injustice of discriminatory behaviour imposed on women by employers and the risks of economic inefficiency. But a drawback of equal-pay legislation is that women are not being victimized in the labour market by the discriminatory practices of employers. Thus, such legislation will not be effective in its main object: it is a cure for which there is no disease.

According to the most recent statistics available, the ratio of female to male earnings in Canada is .64.[7] At first glance, this might appear as *prima facie* evidence of the existence of employer discrimination against women. But, while superficially plausible, such an explanation is highly untenable. In order to see this, let us assume that male and female productivity in the marketplace is exactly equal. If so, successful discriminatory employer behaviour would entail that women, not men, were being paid far less than their marginal productivity levels. Should this state of affairs ever occur in the first place, it would be very unstable. For large profit opportunities could be gained by those willing to employ women. Sex-neutral entrepreneurs could drive to the wall those who insisted upon indulging in their "male chauvinistic" tastes for discrimination.[8] And in the process of "exploiting" the poorly paid women (by hiring them, and bidding up their wages), these profit-oriented businessmen would act so as to equate male and female incomes.[9]

But the facts are clear. Women do earn far less than men. If this is not due to employer discrimination,[10] how then can we account for it? There are several alternative explanations. The first and most basic is that the supposed male/female income gap is really nothing more than a statistical artifact. Consider married women first. One problem is that a "family's income is recorded in the official statistics under the husband's name,"[11] alone. But most marriages, at least in their economic aspects, are like a business partnership. The husband may earn all or most of the income in a superficial legalistic or accounting sense, but it is due, in great part, to the wife's efforts that his salary is as high as it is. It is therefore highly misleading to credit the husband with all or most of his "own" income. It would be much more accurate to divide total family earnings by two and credit each marriage partner with a full-half share.

Suppose there were two attorneys in a partnership who agreed to split the proceeds of the firm equally. *A*, the "outside" partner, deals with clients, conducts the trials, and brings in new business. *B*, the "inside" partner, looks up the precedents, does the research, and manages the office. To credit *A* with all or most of the profits, a ludicrous supposition, makes exactly as much sense as assuming, as does Statistics Canada, that the typical Canadian husband really earns all or most of his "own" income.

In point of fact, husband and wife act in many ways to enhance the registered income of the former and reduce the registered income of the latter. This is done in order to maximize family earnings, given other family desires, such as raising children. Examples of such behaviour are numerous. While this may be changing slowly, at present a married couple will typically choose a geographical location to enhance his earnings, despite what it does to hers.[12] As well, there is almost always an unequal division of child care and housework responsibilities.[13] There are differing labour force participation rates,[14] education and training,[15] and advanced degrees.[16] One indication of the strong asymmetrical effects of marriage on registered earnings[17] (increasing the male's, reducing the female's)[18] is that the female/male earnings ratio for those who have never been married is a startling .992.[19]

A third explanation for the female/male wage gap is occupational choice: women tend to enter lower-paying occupations than men.[20] Here, human capital obsolescence – because of time off for childrearing – will not occur to as great a degree[21] and will not penalize part-time work as stiffly.[22] Occupational choices towards low-income careers ("pink-collar ghettos") are also made by unmarried women. Partially, this may reflect anticipated married status in the future. According to some analysts,[23] this choice may be due to women's lower self-esteem, or self-image, or fear of success. In their view, young girls are socialized into believing that they are inferior to boys, and that they must at all costs avoid competing with males. If true, this phenomenon could account for lower expectations and ambitions. On this basis, wives might reject raises or promotions and avoid entering higher-paying occupations in the first place,[24] for fear of making themselves unattractive to their husbands, present or future. To the degree that such behaviour occurs, it is a personal tragedy for the women involved – psychologically, socially, and personally – in terms of the human potential destroyed. But the explanation for this must be complex and deep-seated; it can hardly be blamed on employer discrimination in the labour market.

There is a reason why the phenomenon of unequal wages between males and females seems to be in need of explanation. It is because of a basic assumption that in the absence of discrimination, male and female earnings would be equal. And underlying this is the view that men and women have equal productivity in the labour market. (With unequal economic productivity, unequal wages would not be in need of any explanation.) But this is more of a pious hope than it is a conclusion based on evidence. That it should be taken as an article of faith that male and female productivities must always and ever be equal has more to do with political ideology than with the realm of economic reality.

So deeply entrenched is this view that it even spills over into methodology. In many econometric and empirical work, any male/female income differential that cannot be accounted for on the basis of variables such as age, education, labour force participation, and so on, is *assumed* to be the result of employer discrimination. Discrimination, that is, is seen to be a "residual"; if gender differentials cannot be explained any other way, they are accounted for on an *a priori* basis by discrimination.

But there are grave problems with such a view. First, "it would seem evident that the failure to explain the wage gap by a given set of variables is consistent with the operation of undiscovered variables having nothing to do with discrimination."[25] Second, the "human capital" variables employed in most regression analyses[26] of this type are only highly imperfect approximations of what really accounts for productivity. Years of schooling, for example, admit of great differences in quality. Their correlation with productivity is far less than exact. Third, this imparts a bias towards that which can be quantified as an explanation of the gender pay gap. Ruled out of court as unquantifiable are such things as ambition, perseverance, motivation, pride in being a breadwinner, reliability, competitiveness, attitude towards risk,[27] and, dare we suggest it, possible innate, biological, sex-linked differences.

Let us now return to equal pay for equal work and equal pay for work of equal value. We have already seen that one drawback of such enactments, as with all legislation interfering with the market process, is the tendency to retard the ability of the economic system to allocate labour to its (continually changing) most optimal employments. In the case of equal pay for work of equal value, third-party "experts" will be called upon to determine whether mainly male occupations, such as that of truck driver, are "really" of equal value to jobs held mostly by females, such as secretary. A spurious scientific objectivity will be imparted by numerically rating such aspects of these callings as training, responsibility, working conditions, education, and so on, and then adding them together to derive a total point score. Say what you will about such a scheme, at least it has one undoubted advantage; it will serve as a full-employment measure for lawyers, for the values assigned to each dimension can only be arbitrary. The procedure will thus open up society to a spate of contentious lawsuits, as the various newly created pressure groups endlessly strive for more favourable ratings.

The point is that there is no such thing as an intrinsic or objective "worth"[28] of a job (nor of goods and services such as paper clips, music lessons, and so on). On the market, crucial in the evaluation of employment slots is the subjective rank orderings of the consumers – the willingness of people to pay for things. The job of whip-maker, horse-trainer, or carriage-wright might have required tremendous investments in skill and great responsibility. But with the invention of the horseless carriage and fickle consumer preferences, all this goes for naught. Were there such, the expert job evaluators at the turn of the century might have given these tasks high point totals. But on the market – that is, in reality – these jobs were suddenly rendered obsolete and valueless.

Presently, the jobs of dentists, dental hygienists, teeth x-ray technicians, all require much intelligence, years of intensive training, great diagnostic skills, and a high level of professionalism. Were the evaluators unleashed upon these jobs to work their magic, there is no doubt at all that a high point total would ensue. But if and when a cure for tooth decay is found, these skills will go the way of the dodo bird, as far as value is concerned. Consumers will no longer be willing to purchase their services, and the returns to human capital invested in these lines will fall precipitously.

Let us consider one more example. Suppose that female prison guards do exactly the same quality and kind of work as that done by male prison guards. We assume, in other words, that male and female prison guards do "equal work." But let us suppose that for some reason women are far more reluctant to enter this profession than are men.[29] Under such conditions, in the marketplace, female prison guards will receive higher salaries than their male colleagues. This, according to the logic of the equal-pay-for-equal-work philosophy, is obviously "unfair."

What can be done? If the female wage rate is lowered to that of the male, there will not be an adequate supply of women prison guards to satisfy the demand. If the male wage rate is increased to match that of the female,[30] there will be an oversupply of male prison guards. If the wage rate of both is set at some intermediate point, there will be an excess supply of men prison guards and a shortage of women prison guards. If the expert evaluators also take into account this phenomenon in their evaluations of male and female prison guard jobs (as well as all other unquantifiable factors that determine wage rates), they will escape the quandary of creating either a shortage and/or surplus of prison guards, but two anomalies will be created. First, the results will be incompatible with equal-pay notions of fairness. If the unequal reluctance of males and females to enter this profession is considered by the evaluators, they will have to award more points to the female guards. Since by stipulation they do the "same work," this would be "unfair." Second, and more basically, if the evaluators take into account *all* phenomena that determine wages in the economy, of what possible use can they be? At best, they will no more than replicate the pattern of wages established on the marketplace. More likely, they will only imperfectly succeed in achieving this goal. After all, entrepreneurs succeed or fail in business to a great degree based on how closely they can tailor wage rates to productivity levels. The compensation of the "experts," in contrast, will depend more on how well they satisfy their political constituencies. If there is, at best, only imperfect success in duplicating the market pattern of wages, this process will misallocate labour throughout the economy.

The implications for future research are clear. More attention should be paid to marital status as an explanation of female/male income differentials. Statistics should be published in a manner that more easily facilitates such research. Attempts should be made at an independent definition and measurement of discrimination. The residual method – especially in the face of nonemployer discrimination – should be rejected. In comparing private- and public-sector discrimination, wage variances – not wage rates – should be considered.

Nina L. Colwill[31]

The questions we have been asked to address in this discussion are time-worn and worrisome ones: How can we, as researchers, help improve the economic status of Canadian women? What directions should our research be taking? There are many valid answers to these questions, just as there are many directions in which our research must proceed. However, this is a particularly critical time in Canadian history, a time in which the popular imagination has been captured by the novel notion of equal pay for work of equal value, and I believe that we should redouble our research efforts in this area. This is an issue that is only incidentally economic and must therefore be addressed from a host of disciplinary perspectives and read by policy makers, top-level managers, and factory workers. Equal pay for work of equal value is a meat-and-potatoes issue, grounded in an even more basic issue: the issue of the differential worth of women and men.

The Worth of Women

We come from a long line of people who place lower value on women than on men. Our society is rooted in a history of female inferiority that has seldom been questioned over the centuries. The Greek philosophers, who have had a profound effect on what is considered to be rational thought, conceptualized women as incomplete men.[32] Their theories gained even more academic power at the turn of this century when psychologists such as Spencer[33] and Freud[34] provided the literature with a biological basis for women's social inferiority and a rationale for what these authors considered to be their instinctive need for submission.

Intellects and academics have had no monopoly on the debasement of women, however. Women have been treated as property under the legal systems of most countries[35] and for centuries have not been allowed the sexual freedom enjoyed by men.[36] The traits attributed to men are seen as more mentally healthy than the traits attributed to women,[37] and people tend to attribute women's successes to good luck rather than to ability.[38] Given the multiplicity of ways in which men and women are seen to differ, then, it is little wonder that they have been accorded very different roles in carrying out their life work.

The Division of Labour by Sex

We live in a nation of sex-differentiated labour – a nation in which more than 95 per cent of the executives are male and more than 95 per cent of the secretaries are female. Although newspaper features about female mechanics and male telephone operators would have us believe otherwise, the division of labour by sex is breaking down much more slowly than might have been expected. In fact, it has been predicted that, given the present rate of change, women will not be represented in management in proportion to their numbers in the workplace until the year 2075.[39]

Did the division of labour by sex grow out of the differential value of women and men, or did women assume lesser value because the division of labour by sex accorded lower value to the work they did? I suspect that both concepts developed slowly and simultaneously and reinforced each other. In any case, Canadians did not invent the division of labour by sex. Rather, we fell heir to an almost universal system with historical antecedents that predate the written word. This system is characterized by men's hunting, fighting, herding, and travelling and by women's nurturing, feeding, and clothing of the family.[40] It has been reinforced throughout the centuries by men's superior size and musculature and by women's ability to bear and nurse the young.

We really have no way of knowing where the division of labour by sex was born, and we have no way of counting the multitude of ways in which it is maintained. One thing is abundantly clear, however: its function has passed into history. It is difficult to imagine a logical argument for women's domination of garment making or men's domination of tool and die making. It is easy to see how it began, with women producing clothing and men producing tools in parallel to their home activities, but one must degenerate into the realm of stereotypes in order to make an argument for the continuation of such a system.

The Worth of Women's Work

Because women have lower social value than men and because men and women do different work, it is not surprising that women's work is valued less highly than men's work. There are two questions that must be addressed in defining the worth of women's work: (1) Is the work performed by a woman considered to be as valuable as identical work performed by a man? (2) Are jobs traditionally performed by women in our society considered to be as valuable as the jobs traditionally performed by men? There are volumes of psychological research documenting the evaluations of the work of women and men, and the answer to these questions is clearly "no." Whether we are speaking of the work that women traditionally do or the work that a particular woman happens to be doing, "women's work" is not perceived to be as valuable as "men's work."[41]

Let's look, for one example of thousands, to the Dutch masters. Their priceless work is a veritable shrine in the Reik's Museum in Amsterdam, and people the world over pay pilgrimage to their talents. There is a guard in every room, well versed in the history of each painting, for thousands of words have been written about these brilliant men. One passage out of these august chambers leads to a quiet, darkened room where one can browse undisturbed by the murmuring of worshipers or the explanations of guards. Here rest the embroideries and needlework of the same period – exquisite pieces of intricacy wrought by skillful artists who have gone nameless. These are the women who have done work of equal value, probably for no pay, certainly for no historical recognition. Their sisters who actually painted during this period – the women who did equal work – have been buried even deeper. To view their art today and to read their history, one must search for manuscripts devoted specifically to female painters, for they have been virtually ignored by the male creators of art history.[42] Thus, as Epstein has noted, "Women at the top are at the *bottom* of the top, just as they are at the bottom of any stratum in which they happen to be represented."

It is theoretically possible for a strong division of labour by sex to exist in a nation in which male and female workers enjoy equal prestige and equal income – for women and men to be separate but equal. In practice, however, it does not work that way. Because men tend to form the ingroup and women the outgroup in the workplace, men are seen as defining the norm and women as deviating from it. Thus, as Steinem has noted,[43] a profession "begins to tilt, like a neighbourhood" when it becomes more than one-third female.

Where Do We Go from Here?

With most of our employed female population clustered in a few occupations, it is difficult to enforce even our equal-pay-for-equal-work legislation, because there are so few comparisons to make between, say, male and female secretaries.[44] In addition, our lawmakers, policy makers, and law enforcers are being asked to go a step further in order to establish and enforce equal-pay-for-work-of-equal-value legislation. They are being asked to separate the concepts of gender and occupation in their evaluation of the worth of every job – a monumental task for any well-socialized adult.

We must begin a new kind of research with a new kind of assumption – that there are ways to view the worth of work independent of sex of the incumbent. This research must take at least three different forms:

1) The research of tomorrow must tackle and retackle our most basic assumptions. Some of these assumptions have already been debunked in research addressing the stereotype that women and men have different attitudes towards work. The bulk of research in this area, drawn from a variety of occupational sources, indicates that the workplace attitudes of women and men are far more alike than different[45] and that the familiar stereotype about women's lack of career interest is merely that – a stereotype.

2) Academics must also be prepared to demonstrate, redemonstrate, and disseminate to the general public the myriad of ways in which Canadians have valued work as a function of sex in the incumbent. Eichler's landmark paper[46] demonstrating the differential prestige accorded men and women in sex-role appropriate and sex-role inappropriate occupations provides a strong beginning for this line of research.

3) Researchers must also attempt to delineate and document the criteria that are being employed by those whose job it is to attach an economic value to various types of work. Until we know the specific criteria employed in the economic evaluation of occupations, it is impossible to know the stereotypes that must be addressed. It has been argued, for instance, that one such unwritten criterion is the perceived career continuity of the incumbent, which enables an employee to appear to be maintaining skills, establishing seniority, and demonstrating loyalty to the organization or the profession.[47] It is further argued that women are perceived as having discontinuous careers.

The research questions arising from these assumptions are fourfold: (1) Does this sexual stereotype actually exist among those who hire and promote? (2) Is this stereotype valid (are there really sex differences in career continuity within occupations)? (3) Is this criterion actually employed by those who hire and promote? (4) Is this criterion valid (is career continuity really a good predictor of productivity)? Until these four questions have been asked of every criterion that is thought to be applied to the evaluation of people and occupations, our arguments about sex discrimination in work of equal value will be ill-informed arguments.

I once believed that we had to solve the issue of equal pay for equal work before researchers and policy makers could begin tackling the issue of equal pay for work of equal value. I now consider that to be a naive belief, for I doubt that we will ever have one without the other. Until women doing the same work as men are seen as equal, it is unlikely that men and women doing different work will be seen as equals. And as long as things feminine and female-dominated are seen as inferior, females, even when doing the work traditionally done by men, will be seen as inferior. Both these lines of research and resultant policy making must proceed simultaneously.

As researchers and as policy makers, we must remember that the genesis of the gap between men and women in the workplace is multidimensional – that women are not being kept down merely by unequal pay. Similarly, the genesis of unequal pay is multidimensional – it is a socially acceptable phenomenon rooted so deeply in our culture that it is inextricably intertwined with countless other beliefs about church, state, family, education, and the intrinsic worth of females and males. Given the multidimensional nature of this problem, then the research effort must be multidimensional. It must be conducted by economists, social psychologists, organizational psychologists, sociologists, theologians, political scientists, and lawyers. It must be written to, and read by, other researchers, policy makers, and the general public; and somebody must pull it all together. Research on sex-role stereotypes, career commitment, legal possibilities and implications, and job evaluations must all be conducted and disseminated not only in academic journals, but in lay publications as well. Academic papers will stimulate further research, policy briefs will influence legal change, and popular books and magazines will reach the people who, on a day-to-day basis, determine the credit, and therefore the money, that men and women receive for the work they do.

In order to reach this ideal, academics must be prepared to create a new record system in the institution in which they work. They must be prepared to credit those who assimilate and evaluate the work of others as well as those who do primary research. They must place a higher value on the ability to write in lay language – to write in a language that can be appreciated not only by their colleagues in their own narrow areas, but by the majority of the Canadian public. And, probably most important of all, they must be prepared to give academic credit to those who write in lay publications.

We have done much in the past 20 years to close the psychological, legal, and economic gap between women and men. Twenty years ago an employer could, with social and legal immunity, pay female employees less than male employees for identical work. Today such behaviour is illegal and socially deplorable. Someday it will be unthinkable to pay secretaries less than janitors. By tackling that goal from a variety of disciplinary angles and by dragging our research out of academic closets, we can give the workplace of the 1990s a rare and precious gift: the gift of equal pay for work of equal value.

Martha MacDonald

I think the popular image today is that the economic status of women has been studied to death, and surely we know all we need to know about this special-interest field. On the contrary, by general academic standards the amount of research thus far on the economic status of women is relatively small and has almost all been done in the last ten years. Programs such as the Women's Bureau, the Social Science and Humanities Research Council of Canada strategic grants, and the growth of women's studies programs have begun to fill the gap. However, the subject area is exceedingly broad, and much of the research thus far has been painted with a wide brush. The detailed work, characteristic of a more mature field, has yet to be done.

On the one hand, we know enough about the basic problems to identify some key policy demands. More research is not needed to bring about better daycare in this country, for example. There is enough knowledge of the mechanisms and extent of inequality to back up lobbies for daycare, equal pay, maternity and/or parental leave, affirmative action, and pension reform. Perhaps on these issues we need research on the failure of the state to respond to these lobbies rather than research on the issues themselves. Certainly, some fine-tuning of policy proposals might help – using cost-benefit estimates and impact projections – but the basic tools for such evaluations are in hand.

On the other hand, there remains a need for intensified research on many aspects of the economic status of women. In many ways, our understanding – both theoretical and empirical – of the economic and social processes generating inequality is very rudimentary. We have been better able to describe the phenomena than to explain them. Research has been hindered by lack of suitable data,[48] lack of funds, and lack of scholarly interest. The need for an interdisciplinary approach to the economic status of women has further hindered progress.

A lot of detailed research is needed – far more than can be discussed here.[49] Before mentioning some areas that I feel are particularly in need of more work, I would like to emphasize two points that are essential to discussions and research on the economic status of women. First, the economic status of women cannot be understood by only examining the labour market and women's performance there. Women's economic role outside the labour market must also be included. Furthermore, we cannot be too narrowly economic in our approach, nor can we focus exclusively on women. The dynamics of an economy that produces too few jobs and distributes them in a noncompetitive way must first be understood.

The second point is that economic inequality in the labour market is deeply entrenched and a product of the natural functioning of our economic system. Divisions by race, ethnicity, and sex are extremely resistant to elimination, for they are not the result of minor imperfections in the market. Many attempts to make gains for one segment of the workforce have resulted in worsening conditions for another. The inequality of women is especially profound. Furthermore, before we look to policy solutions we must recognize that policy has indirectly created and reinforced the inequality.[50] These two points, emphasized in feminist work on sexual inequality and in labour market segmentation theory, inform our questions about why there is unequal status, changes in that status over time, and how the status might best be altered.

I would like to first mention research needed with regard to aspects of the economic position of women that are still not well understood. I will conclude by mentioning research issues related to policy failure and policy impact.

The Allocation of Work and Income

My own research interest is in the organization and allocation of work in our economy – both paid and unpaid – and how it changes over time. This broad conception of work and how it relates to the allocation of income is essential to understanding the economic role and status of women. Many of the questions concerning the wage gap and occupational segregation relate to gaps in our understanding of the organization and allocation of work under varying conditions of development.

Most of the areas I suggest for future research are related to the allocation of work – by sex, among earners in families, among primary and secondary labour markets, between paid and unpaid workers, between developed and less developed countries, and so on. This work must be informed by several diverse bodies of theory. These include labour market analysis, particularly models of discrimination.[51] Also relevant is work in labour market segmentation theory on the creation and allocation of different types of jobs, focusing on the labour process at the level of the firm.[52] Theoretical work in feminist literature on occupational segregation and on the relation between wage and nonwage work is an essential base to new research on the allocation of jobs and income.[53] The selected research issues presented below are not in any order of priority.

Changing Organization of Work: Paid, Unpaid, Self-Employed

The economic position of women has altered over time as the organization of work has changed. Several aspects of this bear investigation to clarify our understanding of how the role of women fits into broader economic processes. The overall workload and status of women change as the work of society shifts among the unpaid domestic sphere, the segmented/segregated wage labour market, and the realm of self-employment. As economic change occurs – whether it be the growth of monopoly, the rise and fall of the public sector, or the demise of independent commodity production – it impacts on the relative size, conditions in, and relationships among, these spheres of work. And in so doing, women's workload and status change. What has been the pattern historically of these changes? What current changes are occurring and why?

In my own research with Patricia Connelly,[54] I am examining rural economies and the change from independent family production to wage labour and semi-independent production. What have been the effects on women's labour? How has the maintenance of semi-independent farmers and fishermen been aided by the availability of women's labour? Under what conditions do women enter wage labour as opposed to engaging in unpaid domestic and subsistence activities?

Another area of transference of work from unpaid to paid occurred with the growth of the public sector. Now with cutbacks, the process is being somewhat reversed. Women's workload and status are affected in the process. For example, care of the sick and the aged falls mainly on women – whether paid or unpaid. Why do these shifts occur and what do they mean for the economic status of women?[55] Most economics research has focused only on paid work, ignoring the economic contribution of the same work done outside the market.[56]

There is also a transference of work occurring from wage work to forms of self-employment such as franchising and subcontracting. Related to this is the tendency to replace wage work with forms of piecework. Such transference often involves a loss of benefits and of organizing potential. These changes are noticeable in the service and trade sectors and in data processing.

Changes in Paid Work

Research still needs to be done on the allocation of paid jobs among the potential workforce and the resultant configuration of incomes.

The sex composition of occupations needs further detailed study. There is evidence of modest gains in occupational diversification for women, with dramatic gains being made in certain fields such as the professions (see Chapter 4). However, the process is not well understood nor has access to a previously male occupation always resulted in improved economic status for women. The entry of women into the male preserve of clerical work, heralded as revolutionary at the time, has created today's pink-collar ghetto.[57] Why is this so? Under what conditions do women gain access to occupations? Do they force their way into new areas, against the resistance of male workers and employers, or do they enter when changes in an occupation begin to make it either less attractive to men, or men less attractive to employers? There is evidence that occupations become devalued in some way as the percentage of women increases. The causal direction is still not well understood. Current examples range from the feminization of fish cutting in the Maritimes to the feminization of pharmacy. In pharmacy, the entry of women coincided with the monopolization of retail pharmacy and the transformation of the pharmacist from an independent professional to a wage labourer. The relative income and status of this group have declined in the process. As women achieve access to more and more occupations, we need to better understand this process of devaluation.

Segmentation can also occur within occupations as the sex composition changes. One can speculate on how this might occur in the increasingly crowded legal field and among the score of new accounting graduates. An occupation may develop a routinized lower-status segment and a high-status segment, with a sexual division of labour. In my own profession, for example, one notices a disproportionate percentage of female Ph.Ds. working in contract research institutes compared with university appointments.

We must also examine the sex composition of *new* occupations, for even these occupations have historically tended to become sex-typed. Women have traditionally gained access to new occupations under two conditions. The first is when the new occupation is a transference into the market of something they did in the nonmarket sexual division of labour – for example, many service sector jobs and food processing jobs. The second condition is when routinized, deskilled jobs are created in a new field. The latter is illustrated by the distribution of women in the new computer-related occupations. We are also reminded here that women are only one component of the potential workforce for such jobs. Minorities and immigrants have also been used for such routinized low-wage work – in factories and in the service sector. How are these groups treated the same or differently in the job allocation process? The "women and other minorities" syndrome must be disentangled conceptually and empirically.[58]

Furthermore, occupations and jobs also get distributed globally, and we must examine the international division of labour and the role of women – both Canadian and Third World women. This is an era of international restructuring of capital and labour.[59] Many jobs are being transferred abroad – both primary labour market, traditionally "male" jobs, such as in heavy industry and durable manufacturing, and traditionally "female" jobs in light manufacturing. Again, there are many ways of organizing production and jobs, ways of allocating jobs, and many labour market segments to draw upon. These processes have important implications for the future prospects of women in the labour market and need to be better understood. The mobility of capital and the flexibility of job forms also have implications for the success of possible policy initiatives. Competition within the workforce is heightened today as is the ability of employers to resist or escape restrictions on their employment practices.

A final aspect of the changing organization and allocation of jobs needing more research is of course the impact of current technological change. Previous technological changes – from mechanization in the factory, to telephone technology, to the introduction of the typewriter – have all had the same impact on women: channeling them into the deskilled, lower-wage, routinized jobs that were created.[60] Preliminary evidence suggests that the new technology is having the same impact. Most discussions focus on the net change in jobs, particularly the threat of job loss for women. This is an important issue and one on which current research, with its micro basis, is inconclusive (see Chapter 8). My own expectation is that there will be a net increase in unemployment for women.

There is another aspect of technological change that is receiving less research attention and that is the quality and allocation of the resultant jobs. Even if the net number of jobs remained the same, the status of women could very well change – and likely change for the worse. While some job enlargement is occurring, much of the change is in the direction of job deskilling, facilitating increased monitoring and control of the labour process, and increasing the flexibility of work organization in terms of shift work, part-time work, and the electronic cottage. How will these jobs and the more highly skilled jobs be allocated among the potential workforce? There is little reason to expect a change from past patterns of allocation; therefore, it is likely that the existing sexual hierarchy will be reimposed on the new job structure.

The technology also has the potential for creating a "missing middle" in terms of skills and income, further driving a wedge between the labour market segments. An increase in the low-wage sector may occur even as some women are making gains in the high-wage sector. We must not be so focused on the narrow issue of the relative male/female wage gap that we ignore questions of absolute levels of economic well-being. Equality could be achieved with both men and women working for low wages in routinized jobs and sharing equally the burden of unemployment.

These issues related to technological change need more research. In the course of this research, we will learn a great deal about the mechanisms and processes of sex segregation and unequal allocation of jobs. This institutional analysis is essential if we are to formulate policy that may alter the status quo in the labour market.

Family Employment and Income Patterns

Another kind of research that must be done is further study of family employment and income patterns. In most labour market studies the unit of analysis is the individual, with some attention paid to their race or sex. However, most people live in families, and wages and job allocation are very much related to family characteristics. There has been some work done on the development of the male family wage – concept and reality – in Canada.[61] The segmentation literature shows that family wages only became a reality in the primary labour market, leaving both men and women earning nonfamily wages elsewhere in the economy. Attempts to secure family wages led to the growth and competitiveness of the secondary labour market.[62] Research is gradually exploding the myth that women who work are augmenting an existing male family wage. Yet more research remains to be done in this area. Evidence suggests that married women working in the secondary labour market are most likely to have husbands who are also in that segment. We need more detailed analysis of how households relate to segmented labour markets under changing conditions of demand and development.

Family "livings" are put together by a combination of wage labour, domestic labour, and self-employment, as mentioned earlier. How are these combinations determined? How does the overall family worktime change as the patterns change? I recently did a small comparison of the status of women in Bermuda and Canada, and I was impressed by the high levels of labour force participation and economic independence of women in Bermuda. There also was a lower wage gap than in Canada. On closer examination, however, I was struck by the incredible number of paid labour-hours families had to work in order to make a living. Is this the direction we are heading in Canada?

Several research questions relate to family employment and income patterns. For example, how are multi-earner families distributed across labour market segments? How has the age/sex composition of earners in families changed over time? How have dependency ratios in the population changed? How have family incomes and income per capita changed in comparison with wage incomes? Only when we understand these relationships can we evaluate the impact on women and families of various policy proposals concerning unemployment insurance, full employment, and income distribution. We do not yet have the empirical knowledge to make decisions about job and incomes policies relevant to this new era.

Policy Impact/Policy Failure

Before concluding, I would like to comment briefly on policy-related research on the status of women. How has the state affected sexual inequality and the gender division of labour? Recent feminist historical evidence thoroughly implicates the state in the maintenance of female inferiority in the labour market.[63] Continued research is needed on the historical and current impact on women of policy measures – both policies aimed at improving the status of women and policies that have other goals. Research is desperately needed on the policy process as well as on policy impact.

In terms of policies directed towards women, in most cases we need to evaluate the failure of policy to achieve major change. Specific policies may be grounded in wrong diagnosis of the cause or process of inequality (for example, too much emphasis on labour supply rather than the organization of demand). Policies may be merely token efforts with no teeth. They may run counter to other economic interests or policies. A decade of policies intended to increase the equality of women has achieved only marginal headway.[64]

Perhaps a more important research emphasis is on the indirect impact on women of policies not aimed at them. In this category are labour market policies, ranging from unemployment insurance, to workers' compensation, to labour standards, to various manpower programs and job creation programs. Many of these serve to support the low-wage sector and perpetuate the use of women as a low-wage/low-rights workforce. The absence of a full-employment policy – in fact the *opposite* of a full-employment policy – has a devastating effect on women in the scramble for jobs.

The economic status of women is also affected by policies removed from the labour market, whether it be welfare policies, tax laws, public transit policies, or regional development policy. The impact of these on women must be considered, for very often the state is aggravating the problem with one set of policies at the same time that it is applying band-aid cures with another set of policies. This is what I meant by not focusing exclusively on "women's issues." All of economic activity and policy is related to the status of women.

Finally, the major policy areas we need to address concern ways of responding to the current economic crisis of technological change, growing unemployment, and international restructuring of capital and labour. The current policy responses of cutbacks and cut-throat competition for jobs, incomes, and markets are having devastating effects on women. We must explore the potential for policies of full employment and/or new methods of distributing and redistributing income.[65] In these matters, we can learn from the European experience. Such policies must be designed with full knowledge of their impact on women. It is a challenge to our research abilities and to our organizing and lobbying abilities to see that this occurs.

Ruth Rose-Lizée

> Facts do not organize themselves into concepts and theories just by being looked at; indeed, except within the framework of concepts and theories, there are no scientific facts but only chaos. There is an inescapable *a priori* element in all scientific work. Questions must be asked before answers can be given. The questions are an expression of our interest in the world; they are, at bottom, valuations. Valuations are thus necessarily involved already at the stage when we observe facts and carry on theoretical analysis, and not only at the stage when we draw political inferences from facts and valuations.[66]

Some of my colleagues will recognize "Yas' Law" in the expression "demand creates its own supply" as the basis for a non-neoclassical economic theory. For the noneconomists in my audience, as well as for the less erudite economists, I will use simpler language: the fundamental problem of women in the labour market is unemployment. The first and foremost concern of our research and our policies must be that of creating jobs with decent working conditions. In my opinion, the availability of such jobs for all women and men who want to work is an absolute prerequisite for a significant improvement in the economic status of women and for the eventual attainment of equality with men. All of the policies that deal with supply – better training, orienting women towards traditionally male occupations, even affirmative action programs – will be truly effective only when the goal of full employment has been met.

It is not my intention here to talk about possible subjects for research; there are already a number of lists.[67] I would, instead, like to discuss the theoretical foundations or, if you prefer, the value judgments that underlie, and that are prerequisites to research on, the economic status of women in the labour market. In so doing, I will oppose two fundamental paradigms: the neoclassical paradigm and the postkeynesian paradigm. The various dual labour market theories will be treated as a microeconomic component of the basically macroeconomic postkeynesian paradigm.

Postkeynesian Theory: What Is It?

Some economists are of the opinion that postkeynesian theory does not constitute a separate and distinct paradigm and even deny the concept of a paradigm as an organizing element for economic theory.[68] In fact, many economists, of widely differing points of view, lay claim to the postkeynesian theory. Therefore, I will propose my own criterion for the boundaries of postkeynesian theory: it is based on the hypothesis that markets in a capitalist economy are not normally in equilibrium; that they have no natural tendency to move towards equilibrium; and, more specifically, that price movements cannot bring about equilibrium.

This criterion is, in my opinion, consistent with the intentions of Keynes himself who called his theory "the general theory" in opposition to the neoclassical theory that he considered to be a particular equilibrium case. It serves to distinguish between true postkeynesians and others whom Joan Robinson calls "bastard keynesians" and whom I prefer to call "schizophrenic keynesians" because they are still trying to reconcile a macroeconomic keynesian theory of underemployment with a microeconomic neoclassical theory of general equilibrium. More specifically, the notions of "the natural rate of unemployment" and of "rational expectations" appeal to a concept of equilibrium to which the economy is attempting to move: they suppose that institutional rigidities, lack of information, and adjustment lags are the only obstacles to attaining full employment and the optimal utilization of resources.

What can we derive from this delimitation of the postkeynesian theory as a basis for the analysis of the functioning of the economic system?

1) The fundamental problem of the contemporary capitalist economy is that it can produce more than what the people who have income and wealth want to consume. We cannot solve this problem by tinkering with aggregate demand; we have to deal with the problem of income distribution and more specifically with the distribution of income between labour and property.

2) The fact that the capitalist economy relies on the profit motive and on the functioning of the market to define its production goals hinders the establishment of a social definition of economic goals and priorities as well as the mobilization of unused resources to attain them.[69]

I would like to emphasize the importance of income distribution as a key element in this theory precisely because Keynes did not sufficiently develop this aspect of his theory, a situation that allowed his interpreters to ignore it almost completely. A macroeconomic postkeynesian theory is also based on a microeconomic theory of imperfect competition, another point neglected by Keynes. When firms operate in a situation of imperfect competition: (1) marginal cost is not equal to price; (2) the value of the marginal product is not equal to the wage rate; (3) the demand for labour is very inelastic with respect to reductions in wages and is determined essentially by the demand for the product, which in its turn is a function of the determinants of aggregate demand and of the distribution of income.

Obviously, I cannot give an introductory course in postkeynesian economics here. I refer you, instead, to Kalecki and to Asimakopulos.[70] It is, however, possible to summarize their conclusions by saying that in a situation of underemployment, like the one through which we are now passing, an increase in the real wages of workers will increase employment – a conclusion that is the exact opposite of what neoclassical theory tells us and on which current policies are based.

Neoclassical Theory and the Status of Women in the Labour Market

There are several neoclassical theories of discrimination: those of Gary Becker,[71] of human capital,[72] of statistical discrimination,[73] and of overcrowding.[74] All of them have certain hypotheses in common:

- Economic agents are rational: if they don't maximize their profits, they at least maximize their utility.
- The market tends towards equilibrium: except in the short run, there is neither excess demand nor excess supply, which means that there is no involuntary unemployment.
- The wage paid to each worker is equal to the value of his or her marginal product; in fact, most neoclassical authors forget that their theory predicts equality between the value of the marginal product and wages only under perfect competition. Under conditions of imperfect competition – that is, in the vast majority of cases – wages are equal to the marginal revenue product, and then only if firms are able to identify the marginal revenue that accrues to the last unit produced.

Neoclassical theories of discrimination do offer an explanation as to why discriminated groups receive lower wages, and several of them also deal with occupational segregation, which is a characteristic of the status of women, blacks, and ethnic minorities in the labour market. The solution that they offer for this problem, however, is to reallocate the different groups among existing jobs in order to better use available resources. They ignore the fact that the discriminated groups also bear a disproportionately large share of the burden of unemployment under conditions of prosperity, as well as during a recession, and that the principal form of misallocation comes from the nonuse of the resources they represent – that is, from unemployment. We will see, a little later, how this difference in approach leads to policy proposals that are different from those of postkeynesian theory.

A Postkeynesian Theory of Discrimination: Dual Labour Markets

In order to explain discrimination, the postkeynesian theory refers to the dual labour market theory.[75] According to this theory, because there are not enough jobs on the market, especially interesting and well-paid jobs, discrimination against certain groups serves as a mechanism for rationing. It makes it possible to reserve the best jobs for white men from well-established ethnic groups who might question the very foundations of the system if their own rate of unemployment rose too high for too long a period.

The basic problem facing women, therefore, is unemployment. As long as unemployment rates exceed 3 or 4 per cent, many women who would like to work will not be able to or will be forced to work at unsatisfactory jobs. As long as there is not enough employment for everybody, there will be tremendous resistance on the part of men to protect their special preserves; we will be in a zero-sum game situation where what women gain is lost by men. Some will object that women have made progress, that there are many more women in the professions and in upper management positions now than there were 10 or 15 years ago. In effect, the mobilization of the women's movement and growing collective awareness has led to some improvements but only for a minority of women in certain social classes. The economic policies of recent years have led to an increase in the gap between rich and poor, and women are still found in disproportionate numbers among the poor.[76]

The fact is that the number of single-parent families is steadily increasing and that women still make up 85 per cent of the heads of these families. Even worse, the average income of single-parent families, after having risen at the beginning of the 1970s, decreased in real terms between 1977 and 1982.[77] The latest figures indicate a reduction in the earnings differentials between men and women, but we have been going through a period where the real wages of workers either have not increased or have decreased. In fact, the evidence is that the reduction in the differential came not from an increase in women's wages but rather from a decrease in men's wages.[78] Official unemployment rates for women have been higher than those of men for most recent years. In addition, one must suspect that hidden unemployment is higher for women than for men. In fact, in May 1984, the official rate of unemployment was 11.7 per cent for both men and women. By my estimates, the real rate was 25.3 per cent for women and 19.4 per cent for men.[79]

The postkeynesian dual labour market theory postulates that the behaviour of women in the labour market is largely conditioned by the possibilities that the market offers them. When employment is available, women enter the labour market. Otherwise, how can we explain why the labour force participation rate of women is 20 per cent higher in Alberta than in Newfoundland? How else can we explain the absolutely phenomenal response of women to the demand for labour during the war? Dussault's study[80] shows that when the jobs occupied by women provide opportunities for promotion and a career profile, they stay in the labour market, and their turnover rate is not any higher than that of men.

There are also indications that women are ready to accept "male jobs" if, in order to do so, they don't have to breach walled fortresses manned by hostile men. Given the recent court decision forcing Canadian National Railways to hire women in jobs traditionally reserved for men, the group that fought the legal battle, Action-travail des femmes, has found itself overwhelmed with inquiries by women who want to apply for these jobs.[81] The same principle applies to training programs. Management faculties in Quebec – and I presume the same thing has occurred elsewhere – now have as many, if not more, women students as male students. Medical and law schools have also had a significant increase in female enrolments (see Chapter 5).

Neoclassicals and Postkeynesians: Different Policy Approaches

The postkeynesian dual labour market theory has had difficulty in being recognized as an alternative theory with the same stature as neoclassical theory, partly because on some points it makes the same empirical predictions and the same policy proposals as the neoclassical theory. On the one hand, postkeynesian theory does not deny the existence or the importance of markets and the way in which they function in a capitalist economy. On the other hand, neoclassical theory has evolved a great deal in recent years as it has attempted to explain certain phenomena, such as discrimination, which, at first sight, should not exist if markets really functioned according to neoclassical postulates. Therefore, I shall first identify the political recommendations that are common to the two approaches in order to better emphasize, in what follows, those that differ.

The neoclassical theory admits that the inferior status of women in the labour market may originate with employers for various reasons: a taste for discrimination; use of indices of average performance in order to make judgments about the whole group; and lack of information on the real abilities of individuals or groups. As a solution, orthodox neoclassicals propose letting the market function while attempting to reinforce competition. Postkeynesians oppose this approach because, in their view, it will not improve the status of women but will instead erode that of men and therefore worsen the problem of inadequate income for the social classes with a high rate of consumption.

Other neoclassicals, of a more institutionalist and more keynesian persuasion, are in favour of laws imposing equal opportunity in employment, promotion, and training, as well as equal pay for equal work. On these points, there would not be any disagreement with those who hold to a postkeynesian dual labour market theory. It has been demonstrated, however, that such laws are of limited effectiveness. Laws on equal opportunity depend on the initiative of the individual to enforce his or her rights and require that members of the discriminated groups be not only as competent as members of the favoured group but generally more competent and certainly more combative. Laws dealing with equal pay for equal work have a limited scope because of the difficulties of comparing different kinds of work and because, in any case, they only apply to a single employer.

Given the limited effect of these laws, those who hold to a neoclassical theory propose policies that operate on the supply side: in order to improve their lot, women must choose the proper training and enter traditionally male occupations. In fact, studies by Blau and by Dussault show that, even when men and women are in the same occupations or professions, there is too often segregation by employer and that the employers who pay the lowest wages hire mainly women.[82] I have even been told by the manager of a garment factory in Montreal that he reserves the best-paid sewing machine jobs for men because they have greater manual dexterity than women.[83] In the banks, experienced women are used to train men earning much higher salaries who will become senior managers, although some banks, recently faced with the threat of unionization, have modified their practices.[84]

In other words, neoclassical theory starts with the hypothesis that markets are in equilibrium, that everybody can therefore find a job and that the problem of discrimination can be resolved by redistributing men and women among the existing jobs.

The postkeynesian dual labour market theory, on the other hand, questions the number of jobs created in a market economy, as well as the structure and distribution of these jobs. It attributes the current economic recession to the tendency inherent in capitalism to concentrate wealth and income progressively in the hands of a few persons and institutions with a low propensity to consume. In the absence of markets, incentives for investment are also weak. Current policies whose effect is to restrict the growth of wages in real terms, to eliminate jobs in the public sector, and to destabilize jobs in all sectors are counterproductive and prevent an economic recovery, not to say that they pose major obstacles to improvement in the status of women.

The tenants of a postkeynesian theory are not opposed to economic progress or to efforts to increase productivity and reduce waste. However, if such efforts are not accompanied by proportional improvements in the standard of living of the population, whether it be through higher individual wages, better public services, or a reduction in working time, they will have the effect of destroying outlets for the increased production and therefore of depressing the economy. The standard of living must be increased not only in the developed countries but also, and especially, in Third World countries where an important part of the gains in productivity are occurring. Beyond egalitarian and humanitarian considerations, we must not forget that these countries offer the greatest potential for new markets and therefore represent the key to a new prosperity.

A concerted intervention on the part of governments is therefore necessary in order to create enough jobs. Politically, given the budget deficits of most of the governments of industrialized countries, we also have to worry about the distribution of incomes, on the one hand, between governments and the private sector and, on the other, within the private sector between people with a high propensity to consume and those with a low propensity. These considerations argue in favour of an immediate and substantial reduction in interest rates, as well as a reform of the tax system in order to make it much more progressive in practice and not just in principle.

Earlier, I indicated that the problem of a capitalist economy has to do not only with the maintenance of aggregate demand through a better distribution of income but also with the creation of institutions that would allow us to set and carry out social priorities. Most neoclassicals, as well as postkeynesians, would agree that the establishment of an adequate network of child care services, as well as a program of parental leave, are measures essential to a position of equality in the labour market for women. These measures could also become part of a policy of job creation requiring little capital and having a high domestic multiplier. I am certain that we could find many other similar projects, starting with at-home services for older people; mass transportation; and depollution of our rivers, our soil, and our cities.

Conclusion

It is unlikely that I will wish to quarrel with the proposals that others will make, asking for measures to ensure equal opportunity, daycare centres, parental leave, or even efforts to encourage women to move into nontraditional training programs and occupations. I am of the opinion, however, that all these measures will have a mitigated effect and, at the limit, will only displace the problems of poverty and lack of integration in the economy from one group to another if they are not accompanied by a vigorous policy of full employment and a redirection of our social priorities.

Jennifer Stoddart

The type of research carried out by our Council is more concerned with putting into practice economists' ideas than with theoretical research. Our present preoccupation is the development of policies that address the problems faced by women. This is why the Council feels it is important to point out the areas of economic activity that economists have tended to neglect. Because of the size of our staff and, naturally, of our budget, the Council is not in a position to undertake fundamental or exhaustive research projects of an economic nature. Thus we rely heavily on the work of other organizations, such as the Economic Council of Canada and various universities. Consequently, we would like to outline the kind of economic analysis that is needed at the present time.

Given the theme of this Colloquium, there is no need to rehash the reasons why the economic status of women is second-class, not only on the labour market but within the family and in our social structures generally. This fact is universally recognized, and debate is now turning to the reasons behind this state of affairs and to the policies necessary to correct some of these injustices. The report released recently by Judge Rosalie Abella is a good example of such efforts.[85] We are also beginning to examine ways by which the value of work done in the home can be recognized, at least in part.[86] Discussion of pension reform, including the possibility of making housewives eligible for such programs, is evidence of this movement.[87]

However, in spite of this knowledge of some aspects of women's paid and unpaid labour, our society continues to see women not as active agents in the economic process but rather identifies them in terms of their social and cultural roles. As a group, they bear the behavioural characteristics that society ideally ascribes to them. That women are economic agents of their own, that all their decisions, acts, and relationships have an economic meaning or value of their own, is still not well understood. The historical reasons for this, of course, are quite clear. And since the definition of knowledge and its production is a process from which women are still, although with some exceptions, largely excluded,[88] this lack of knowledge, which amounts to a denial of the existence of women as an economic force in society, is not surprising.

This observation is based on our direct experience in various studies that the Advisory Council has done over the last three years.[89] In order to illustrate more clearly my thesis that many aspects of the economic role of women are ignored, I will briefly tell you about some of the problems we encountered in carrying out various studies.

Prostitution

Prostitution in Canada is, for all of us, an acute social problem. It is also, for a researcher, a fascinating topic to study.[90] In attempting to provide the Canadian public with a brief overview of prostitution and the problems that it poses for women – both prostitutes themselves and those in the wider society – we immediately encountered the fact that there existed virtually no data in the economics of the prostitution industry in Canada. Prostitution has variously been analysed as a moral problem, a threat to public health, and a civic nuisance.[91] Prostitutes themselves, until recently largely women, have been analysed as fallen creatures, nymphomaniacs, social deviants, and products of broken homes.[92]

However, the analysis of prostitution as work and of the economic links generated and necessary for this type of paid work seems to have received almost no serious attention. We still concentrate our efforts on the women who are prostitutes and what can be done to minimize the public nuisance caused by their activities.[93] Ironically, the world's oldest profession is not really considered a labour market activity. Therefore, because its distinctive characteristics are rooted in gender inequality and sexual taboos, comprehension of prostitution as primarily an economic phenomenon remains very partial. I suggest that, because of our unwillingness to consider prostitution as a world of its own, with its own economic organization of producers, consumers, managers, and regulators who are the prostitutes, clients, pimps, and police, we may still be a very long way from finding any real solution to the problem.

The proliferation of pornography in the last 15 years is usually discussed with reference to the debate raging between the proponents of freedom of speech and those who would exercise various degrees of censorship in the name of values, ranging from the sanctity of the family to the human rights of individuals.[94] Again, whatever the merits of the relative arguments may be, knowledge of the economic empires, both legal and illicit, that maintain and facilitate mass consumption of pornography today is extremely limited. Once again, the pornography industry does not seem to have been considered a legitimate area of study for economists. To the best of my knowledge, only one brief was presented to the Fraser Commission on Prostitution and Pornography by an economist.[95] In saying this, I do not want to deny the very real problems of data collection and verification that arise in any investigation of an underground economic phenomenon such as pornography and prostitution.

Parental Leave

With the majority of Canadian women of childbearing age in the labour force and with their increasing unwillingness, if not inability, to carry the double burden of a paid job and child care and household duties, the issues of daycare and parental leave have become questions for a national policy agenda.[96] These questions have economic repercussions that could rival those of our unemployment insurance or medicare systems. Once again, in attempting to study the cost both in immediate dollars to taxpayers, employees, and employers and in long-term social costs of a system of parental leave in Canada, the Advisory Council could rely on little economic data on the question. The very recent studies of Monica Townson for Labour Canada and Professor Albert Breton for the Economic Council are the two major exceptions that come to mind.[97]

This tremendous lag in giving serious economic attention to what is clearly a very costly function for the individual woman, for parents, for employers, and for the state, whichever way you want to divide the costs of child raising in today's society, is a direct result of the fact that, until very recently, parental care for young children was equated with motherhood. It was seen to be a social duty, a biologically dictated state of being, and an emotional investment on the part of women. Certainly, it was not seen as a contribution to the economic future of Canada.

Marriage and Divorce

In a recently published study on family law, which we entitled significantly *Love, Marriage and Money . . .*,[98] we were dismayed to find that we had to rely on census material almost 10 years out of date, and far too often on U.S. studies. While various well-known economic indicators are measured every month, the fluctuation in the financial well-being of many Canadian families remains largely ignored. Although one out of three Canadian marriages ends in divorce,[99] we have virtually no systematic data on the economic fate of the various family members when a family breaks up. Studies on the enforcement of maintenance and alimony payments across Canada can be counted on the fingers of a hand.[100] The economic fate of male and female partners and their dependants when families break up and re-form seems to be unknown in Canada.

The reason for this state of affairs is probably not that the rate of divorce in Canadian society has increased so quickly that our knowledge is not able to keep up with it. Rather, it is our unwillingness to acknowledge fully the importance of the economic dimension of the existence of former spouses. The fact that even lawyers and judges casually lump together in their discussions of maintenance payments the needs of former spouses and the needs of dependent minor children for which former spouses may have day-to-day care[101] is another indication of our unwillingness to acknowledge the economic value of the various functions that women perform in society and particularly those done within the family.

Adolescents

We have just finished a study on how adolescent women see their future.[102] We uncovered little data about adolescents as consumers and their specific conditions of work in the paid labour market. Moreover, it is clear that, for adolescent women in a consumer-oriented society, money is extremely important, just as important as health care and sexuality according to a study done by the Quebec Council for the Status of Women.[103] Adolescents today quite naturally observe that the way to autonomy is through a supply of ready cash. Yet, the ideology to which I have referred, which denies and underrates the economic role of women, has already worked its effects on these girls.

However, in our research, we observed widespread public attention given to adolescent women in crisis. The crises singled out were clearly sexually related: teenage prostitution and pregnancy. Once again, clients and teenage fathers remained largely invisible. According to an OECD study, adolescent women and their families accept more readily the effects of youth unemployment than do young men and their families.[104] Somehow, an unemployed young woman does not have to be as worried about her place in the labour market as a young man would be, because chances are that she will marry soon. The magnitude of youth unemployment in Canada today suggests that a similar study should be carried out here.[105] If these young women are encouraged to minimize the importance of their insertion into the paid labour market, we will only prolong a pattern of economic dependency that, leaving aside problems of equity, is a serious public policy consideration for our future.

Women as Health Guardians in the Home

Finally, I would like to refer to a study that we are just finishing on women as health guardians in the home.[106] In this study, we have tried to circumscribe the extent to which women monitor, manage, and organize the physical well-being of their family, not only by providing health services directly but by making crucial decisions about the use of medical services, community health care facilities, and drugs.

We are trying to document a form of labour that is different and distinct from housework or ordinary child care and that is not yet recognized as such. We confirmed what the sociologists of health had already discovered: that the so-called "sick role" that can be played by any one of the family members is discretionary. But in fact, this role is rarely played by women.[107] Most of the women told our interviewers that they simply didn't have time and couldn't afford to be sick. And besides, who could care for the other members of the family? This role of medical care giver, which has no economic recognition, seems to be considered, in the words of John Kenneth Galbraith, as "a convenient social virtue."[108]

From these various examples, what concrete suggestions can we draw for the orientation of future research for economists? First of all, it must be stressed that economics as a discipline relies heavily on the social sciences and, as such, is highly vulnerable to making assumptions and constructing models based on current perceptions of social reality. For this reason, it is especially important that economists follow guidelines for nonsexist research to ensure that prejudices and what may be erroneous assumptions are not incorporated into their work as scientific hypotheses.[109] We must consider the economic behaviour of women just as we consider that of men. We must not consider women as motivated only by the values that society wishes to ascribe to their sex. If we continue to do so, we will also continue to have a serious distortion of much of the reality of female behaviour. The example I have given of prostitution as part of our contemporary service industry illustrates that point very simply.

There is an obvious argument to be made in favour of the identification of women as economic beings in terms of social justice. However, we are all, doubtless, familiar with that argument. I would like to point out to you another reason for developing research in these areas. That is because we need it in order to formulate the social and economic policy that is appropriate for our overall social needs.

If we ignore the facts I have mentioned above, the resulting policies will have little chance of resolving these social problems. In June 1984, for example, a bill was introduced by the federal government to amend the Indian Act; it died on the order paper.[110] Sections of the Act that discriminate on the basis of sex were to have been repealed. Women and children who are adversely affected by the provisions of the Act as it now stands were to be able to rejoin their bands after a period of two years.[111] It is interesting to note that this issue has always fallen under the heading of social justice and individual freedom, even though from the very beginning it was evident that the question had an important economic dimension as well. Yet there has been no systematic study undertaken by the government or any other authority on the economic impact of reintegration. Many of the objections raised to the bill were based on this fact. As of November, nothing has changed, however, and there was no indication that any serious economic study would be undertaken in the near future to assess the effects of a decision one way or another.

Another example is the lack of an adequate mechanism for collecting support payments, not simply for ex-wives but more importantly for children. The result is that many citizens in this position are forced to turn to welfare. In the present climate of austerity, it is surprising that such a program has not been set up, particularly since it would be relatively simple to do and would significantly reduce the amount of welfare payments made to those affected.

The fact that economics, discussion about jobs, careers, and investment are still far more familiar to men than to women means that we continue to encourage public perception of the male role as being, above all, an economic one and the female role as being primarily a social one. This will have drastic consequences for the ability of our children to adapt and survive in tomorrow's society. Undoubtedly, the rapid change in labour force participation patterns,[112] economic structures of the family,[113] and sex role expectations[114] have not helped women as a group, or men as a group, to understand each other either within or without the institution of marriage. Marriage still remains for many a source of acute disillusion. Much of this disillusion can be traced to the dissonance between social myths and economic realities.

Finally, we need to look at both the subjective and objective definitions of work, leisure, economic motivation, productive use of time, and so on. Professor Shaw[115] of Dalhousie University has recently shown how women's conception of leisure tends to include family-support activities; for example, taking the baby to the park and knitting her a sweater while she plays. Men's definition of leisure, on the other hand, tends to be something like going to the golf course all day Saturday. For economists, the consequences of both these activities, self-defined as leisure, can be rapidly analysed. However, to the best of my knowledge, they usually are not.

Here we see a phenomenon of self-effacement by which an entire group of individuals, in this case women, assesses its economic activities in such a way as to de-emphasize their economic worth. In order to reveal women's true contribution, economics as a discipline must not only become more receptive to an interdisciplinary approach, but it must also be ready to explore areas previously regarded as outside its province. A concentrated effort is also needed to encourage and financially assist research on women and their economic role.[116] In addition, women themselves must be prepared to participate in this quest for knowledge and to help focus it. The present Colloquium, organized by the Economic Council of Canada, represents a promising step in this direction.

Floor Discussion

The discussion following the panel presentations focused on two main areas: first, on the issue of women's inferior labour market status, illustrated most graphically in the wage gap between male and female workers; and, second, on the key areas for future research and policy action.

Participants had a variety of comments to make on the first topic. Several mentioned that women are at a disadvantage in labour markets across the world, irrespective of political and cultural systems. According to Professor Rose-Lizée, their problems are more acute in the capitalist, free-market system primarily, in her opinion, because of greater inequities in income distribution.

Mr. Block, however, disputed the contention that observed differences between male and female earnings can be attributed to employer discrimination. He argued that evidence – such as that from his own research on never-married male and female workers – indicates men and women who are equal in key respects (education, experience, attachment to the labour force, and so on) earn virtually equal wages. In response, one participant drew his attention to research establishing the existence of a 5 to 10 per cent wage differential between men and women in identical jobs in the same enterprise. That finding, in her view, confirms the existence of employer discrimination. The Employment Standards branches of provincial governments recognize this discrepancy, she added, and address it through equal-pay measures. Mr. Block, however, disagreed with this viewpoint, claiming that employers are much less likely to act in a discriminatory fashion than are consumers and fellow employees, because their concern is first and foremost with making profits. If women are equally productive and at a lower-wage level than men, he observed, employers will hire them first.

Professor Colwill took exception to Mr. Block's line of reasoning on a number of counts. She noted that evidence of wage similarities between never-married men and women, even if accurate, has little relevance for the large group of married women in the workforce. Further, she added, Mr. Block's analysis of this group, and of employer behaviour, suggests both that women should not marry if they want the same pay as men, and also that if more women accept lower wages, more will be employed. As a psychologist, these conclusions made no sense to her whatsoever, she said.

Mr. Block acknowledged that marriage has a negative impact on women's incomes, noting that it has the reverse effect for men. However, he ascribed this not to discrimination in the workplace but rather to the fact that women shoulder the burden of household responsibilities, leaving men free to pursue their careers.

Professor MacDonald observed that Mr. Block painted a good picture of the vicious circle entrapping women. Efforts to improve their situation, she said, should be directed at two fronts: improving home conditions through a fairer distribution of responsibilities, so that women have more freedom to develop their careers; and/or improving conditions in the labour market through equal-pay legislation, which, as a by-product, could lead to better household arrangements.

Again on this topic, one participant found it puzzling that the wage gap between French-speaking and English-speaking male workers has narrowed dramatically over the decade, whereas that has not been the case for male and female workers. Another suggested that women's only recourse lies in organizing and fighting their case through unions.

With regard to the question of future research, there was unanimity on the need for better and more extensive data, particularly in the nonmarket area, but also at the individual plant and firm level. Professor MacDonald observed that, in her experience, case study data are not particularly well received in Canada. Ms. Stoddart maintained that analysis of the economic status of women should encompass not only the labour market aspects, but the nonlabour market ones as well. Developing adequate public policy to improve the economic situation of women will depend heavily on establishing the latter as a legitimate research area, she said.

Another participant outlined three key areas for future action: improvement in data, changes in the approach taken by the economy to women's work and its economic value, and sharing of the responsibility for "parenting." While there are signs of improvement in the first of these requirements, she said, insufficient attention has been paid to the other two.

In summing up, Ms. Eichler, as chairperson, noted that the Colloquium drew attention to a wide range of neglected topics that might be investigated in future by the Economic Council. The presentations and discussions, in her view, also underlined the need for much better integration of women's concerns within future economic analysis. Given that women are now in the majority, she concluded, they should refuse to accept any theoretical framework or, indeed, any policy failing to address their economic situation.

11 Summary of Proceedings

Presentation by Muriel Armstrong

The Colloquium on the Economic Status of Women in the Labour Market began with a description of some of the characteristics of the female labour market and an introduction to the issue of women's financial status. Jeannine David-McNeil pointed out that the female participation rate has more than doubled in the last three decades. If that rate continues, by the year 2000 about half of the workforce will be women, and their participation rate will be less than 15 percentage points below that of males. For many women, work outside the home means essentially holding two jobs, and policies are needed to help them get access to the market and to cope with the load they must bear.

Three out of four women's jobs are in the service sector. The feminization rate has risen in all industries including those traditionally dominated by females, which have increasingly become women's "ghettos." Such concentration creates problems of oversupply and hence low wages and female unemployment, and it underlines the need to discuss measures to encourage occupational diversification.

What might be considered another female "ghetto" is the area of part-time work. Close to three-quarters of part-time workers are women. A large majority of them work part-time by choice because of family responsibilities. The results of that choice, however, are low wages, poor fringe benefits, and limited job security. The Commission of Inquiry into Part-Time Work has made proposals about fair wage levels, prorating fringe benefits, and pension plans.

The present business cycle apart, unemployment rates tend to be higher for women than men; this reflects in part such factors as less seniority, less labour market experience, and concentration in a limited number of occupations and industries. Policies to combat structural unemployment, such as retraining, occupational diversification, and job creation in female-dominated occupations, may be required to improve their situation. Microelectronic technology can be expected to have an enormous impact on jobs in the service sector, where women are highly concentrated.

The financial status of women is a major concern. The male/female earnings gap has diminished somewhat, but women's earnings remain well below those of men. This may be because of oversupply in female-dominated sectors or women's concentration in poorly paid occupations. The limited degree of unionization and the large number of women working part-time may also have an effect. There are some income disparities that at least raise the question of discrimination even if they do not prove it.

Daycare

Another significant characteristic of the female labour market is that by 1984 almost half of all mothers with preschoolers were in the labour force, and the proportion is growing. All must have care of some kind for their children. Slightly less than 90 per cent use informal arrangements; the rest use daycare. Daycare is expensive, which explains the demand for universal subsidies rather than subsidies for just the poor. Michael Krashinsky argued that daycare subsidies are inefficient; it would be more efficient to make the costs of child care fully tax-deductible and, beyond that, to reduce the high rates of taxation on working mothers. Subsidies in excess of deductibility are justifiable only if it can be assumed that parents are not devoting sufficient resources to their children. If that is so, then such subsidies should be available to all children, not just to those whose mothers work and choose to use formal child-care arrangements.

Professor Krashinsky argued that the present estimates of $1 billion to $2 billion for the costs of universal subsidies for the children of working mothers are too low. Costs depend on whether the service is made available to just the present number of preschoolers, or whether it is assumed, more realistically, that free daycare will encourage more mothers to go to work and to demand an extension of the service to include children up to age 12. If in addition it is assumed that unionization will spread and salaries will increase as governments' contributions rise, then we may be talking costs of $3, $6, $10, $20 or even $40 billion (if daycare wages rise to the level of those of public school teachers).

Full subsidization would lead to overuse of formal daycare as mothers using informal, unsubsidized services switch to formal ones, and as nonworking mothers are induced to enter the labour force, whether or not their earnings are sufficient to cover the costs of the service. With full deductibility, on the other hand, mothers who cannot earn more than the cost of daycare are not induced to enter the labour force.

To ease the tax burden, Professor Krashinsky suggested that exemptions for children be raised dramatically, that either parent be allowed to claim them, and, of course, that the costs of child care be fully deductible. Such measures would be preferable to acceding to the politically popular demands by overtaxed mothers to get relief through subsidies. Such a tax system would be more neutral than child care subsidies in its impact on the choice to be made between working or not working and on the kind of child care service to be used if mothers choose to work.

An argument sometimes given for heavily subsidized formal child-care is that the children will benefit from improved care. If that is the goal, then Professor Krashinsky advocated an enrichment program for *all* children, not just the children of working mothers who use daycare services.

Nicole Boily expressed her opposition to a neutral approach to daycare by governments; instead she advocated a more interventionist policy, though one that continues to respect freedom of choice. Like education and health care, daycare should be an integral part of the social system. It benefits working parents, helps to ensure the proper development of children, and is a prerequisite to the right of women to enjoy the same employment opportunities as men.

Government intervention in daycare does not necessarily mean free service for all, as is evident from the Quebec system. She suggested that tax measures like those proposed by Professor Krashinsky are elitist: they would correct the financial inequities of working mothers with good salaries, since the degree of assistance increases with the level of earnings, but would not help parents in lower-income groups. A comprehensive, high-quality daycare system that can keep up with today's needs requires not only fiscal measures like tax deductibility, but also direct government assistance.

Paid Parental Leave

It is logical that paid parental leave should have become an issue because a majority of women of childbearing age are now in the labour force, most of them holding full-time jobs. Those eligible for maternity leave are paid 60 per cent of their previous earnings (up to a ceiling) for 15 weeks under the unemployment insurance scheme. The current objective, according to Monica Townson, is to get 95 or 100 per cent of previous earnings – not just 60 per cent – payable for a longer period and with reduced entry requirements. Benefits should be paid to either parent (to enable men to participate in domestic labour in the same way as women participate in paid work) – an option that has been available to adoptive parents since January 1984. Many examples exist of more generous schemes in Europe. Some unions have already achieved paid parental leave through collective bargaining, and equity suggests that there should be a national policy in Canada.

The arguments against such a policy are that children are seen as private goods for whom the state has no responsibility, that a national program would cost too much, and that it would encourage women to have more children. The last argument carries little weight since a few weeks of benefits would be unlikely to tip the balance for many prospective parents when the estimated cost of caring for a child for 18 years is as high as $100,000.

If paid parental leaves are negotiated as part of a package of benefits offered by employers in the private sector, then, given their occupational distribution, too few women will be eligible. Therefore Monica Townson favoured extending the maternity provisions of the unemployment insurance scheme. The costs will depend on which maternity provisions are implemented and what percentage of the population takes advantage of them. A generous scheme could increase annual costs by almost $1 billion.

The existing maternity leave is financed by employers and employees. If there continues to be no contribution from the government, then, according to Monica Townson, a program extended to 26 weeks at 95 per cent of maximum insurable earnings with an entrance requirement of 10 to 14 weeks and used by 70 per cent of the eligible population would add about $0.31 to the maximum payments by employees of $2.30 for each $100 of weekly insurable earnings (currently $425) and $0.43 to employers' present maximum costs of $3.22 per $100 of weekly earnings.

Achieving such a policy will not be easy. There are objections to having *any* maternity benefits in the unemployment insurance scheme. A payment of 95 per cent for maternity and 60 per cent for other kinds of unemployment will be described as inequitable. If the government contributes, the deficit will increase. There will be objections to burdening businesses, especially small businesses, with increased costs.

Peter Hicks raised the question of whether, in view of the dramatic increase in labour market participation of mothers with young children, one can claim that the existing parental leave arrangements have been a significant deterrent to participation. He considers the increased cost of such a program as the main obstacle to implementing changes and regards $0.30 or $0.40 per $100 of insurable earnings as a major hurdle for business in the present economic climate.

He wondered whether unemployment insurance is the appropriate vehicle for such a program, but he noted that in the past it had shown the flexibility needed by such a policy. Moreover, now is a good time to make such a proposal since the entire unemployment insurance scheme is about to come under parliamentary review.

Occupational Diversification

Many authors blame the concentration of women in a small number of occupations for a considerable part – as much as 40 per cent – of the male/female earnings gap. Policies to diversify women's occupations, therefore, should help to close that gap.

Diversification can occur either when women move into male-dominated occupations or, conversely, when men move into female-dominated sectors; Jac-André Boulet pointed out that in fact it is the former that is bringing about the increasing diversification now under way. The proportion of women under 40 entering male-dominated professions is increasing perceptibly. Interestingly enough, in the 1970s, the greater the male majority in a profession, the greater the tendency of women to enter it. Moreover, it is in these professions that women's incomes increased the most. At the same time, however, increased numbers moved into the 20 least-well-paid professions; this has tended to offset some of the progress elsewhere.

At the present rate, by the year 2000, 29 or 30 per cent of the labour force in male-dominated professions could be female, compared with 16 per cent in 1971 and 23 per cent in 1981. Women have a long way to go before their proportions in the various occupations approach their share of the workforce.

Owing to the importance of occupational diversification in explaining the income gap, governments have enacted a series of measures in the last 15 years to encourage women to increase their education and diversify their areas of specialization. The National Training Program of Employment and Immigration Canada promotes diversification through such measures as counselling and offering orientation courses to encourage women to enter nontraditional occupations; preparing special courses in mathematics, science, and computer science; and reimbursing employers who train women in nontraditional occupations. One problem is that the training necessary for the higher-income occupations is likely to be at the university level rather than in labour force training programs.

Policies aimed at eliminating the male/female earnings gap do not have to focus exclusively on male-dominated professions. Women should be encouraged to train for any profession where salaries are above the market average, including more responsible positions in female-dominated occupations.

Jac-André Boulet ended his chapter with a list of policies to counter the decline in the number of women participating in the various training programs. They included increasing financial assistance, enlarging the definition of nontraditional employment to include any profession with more than half (rather than two-thirds) males, emphasizing occupations where salaries are above average, and developing a national program of education leave to which women could get access. Counselling and information services could be improved, and steps could be taken to ensure a more equal division of family responsibilities, by, for example, improving child care services and parental leave policies.

Educating women is an important factor in reducing the male/female income differential, but Roslyn Kunin rejected it as a sufficient condition because women's education is subject to diminishing returns. Occupational diversification, too, is important; but, by itself, it may not solve the problem either. This led to a discussion of other factors that have been suggested as causes of the differential. Dr. Kunin rejected family structure as a main cause of women's lower incomes. The current economic slowdown, on the other hand, and the resulting excess supply make it very difficult for women to break into nontraditional fields; improvements in the economic situation are necessary to help close the earnings gap. To complicate matters further, technological change is increasing the excess supply in traditionally female fields. It is suggested that another requirement, if the income gap is to be closed, is political and attitudinal training for women.

Women and Education

Concern about the role of education in occupational segregation was reinforced by Jane Gaskell. Educational institutions start off all students at the age of five in the same curriculum, but as a result of streaming, girls opt for programs that lead to lower-paying jobs and sexually segregated occupations, even when their formal level of schooling is the same as that of boys. The differentiation parallels, and is a response to, the differentiation in the labour market.

Accurate data on the extent of segregation by gender in the great variety of existing institutions and programs are difficult to come by. It is clear, however, that there are substantial differences in enrolment patterns and that these differences begin in high school, where girls tend to drop out of mathematics and sciences. At the university level, women have rapidly increased their representation in traditionally male fields like commerce, law, medicine, dentistry, and veterinary medicine. There is less evidence of desegregation in community colleges, vocational schools, and high schools.

Explanations for this gender segregation are of two kinds: those that focus on students and those that focus on programs. The differences in students include differences in aptitude and achievement; these tend to be small and to favour women, at least until the end of high school. There is debate about the existence of sex-based differences in mathematics and spatial abilities. It is clear, however, that the overlap in ability and achievement is much greater than the overlap in course enrolment and labour market participation. Personality differences are proposed as an explanation; women are said to differ in attributes like confidence, anxiety, aggression, fear of success, and independence. Lack of family support for girls entering nontraditional areas may have an impact, as may young people's attitudes towards gender.

As for program characteristics, some research suggests that increasing common cores would lessen the amount of differentiation. Compulsory core courses like mathematics could be increased, which would ensure that girls have the necessary prerequisites for study in nontraditional fields. Sometimes eligibility for programs may involve gender and may not include criteria that recognize women's strengths. The number of women enrolled in a program and the supportiveness of the environment may also have an effect, as may the kind of support services, including counselling, daycare services, financial aid, and job placement services for women.

Professor Gaskell believes that policies to help achieve sexual equality in education must begin with an improvement in the collection, analysis, and dissemination of data. Governments could provide resources to encourage efforts to get women into a broader range of programs. A decentralized, multifaceted approach is necessary, starting at the high school level. The various initiatives need to be evaluated, and information about the successful ones must be disseminated.

The educational system and family traditions are jointly responsible for conditioning girls for a dependent role, and Madeleine Delaney-LeBlanc said that to build a nonsexist educational system, equal access at all levels is not enough. Equal results are what are needed, which means graduating girls from various programs in numbers representative of their proportion in the educational system. The first requirement for carrying out such a policy is more data. The means of improving the system include positive interventions such as introducing a compulsory core in mathematics, science, and computer science; and affirmative action such as hiring female teachers at all levels who can serve as role models and having universities and community colleges actively recruit and support women students in traditionally male-dominated areas of study. There is also a need for corrective action – countering sexual stereotypes in school texts, for example – and political assistance in the form of leadership and financing, to help bring about gender neutrality in education.

Equal-Pay Policy

From the role of education in perpetuating segregated occupations, the discussion turned to the role of comparable-worth legislation in eliminating the existing female/male wage differentials that result from occupational segregation. According to Roberta Edgecombe Robb, such differences may be at least as important quantitatively as wage discrimination in explaining the wage gap within occupations.

The criterion for assessing the value of work in a given establishment, according to the Canadian Human Rights Act, is the composite of skill, effort, and responsibility required in the performance of the work and the conditions under which the work is performed. Since, in the economic theory of perfect competition, workers in jobs exhibiting the above characteristics will have the same marginal revenue products and hence, in the long run, will tend to earn the same wages, the equal-value concept can be considered to have some foundation in economic theory.

Wage differentials may exist in competitive markets for reasons other than discrimination, however; economic rents may arise if short-run supply curves are inelastic. Overcrowding, whether because of workers' tastes and preferences or pre-labour-market conditions that restrict the range of occupations open to a particular group, will lower the marginal revenue product and hence the wage. Wage differentials may exist to compensate for undesirable characteristics such as high risks or instability of employment. If these differences are not identified and if women's wages are raised because they are considered discriminatory, then the result may be reduced employment opportunities for women. Because such differentials are difficult to identify and to weight, Professor Edgecombe Robb advocated caution in enforcing the legislation.

If wage differentials between jobs of equal value are correctly diagnosed as discriminatory, then the effects of enforcing the legislation will depend on how occupational segregation and occupational differentials by sex occur. There are several models that purport to explain this. Becker's model, for example, suggests that discrimination may occur because employers, employees, and/or customers may be prejudiced and may want incentives to compensate – incentives that will lead to male/female wage differentials. The "statistical discrimination" hypothesis suggests that profit-maximizing employers will discriminate against women if they believe them to be less productive or less-stable employees on average than men. That belief may be quite unfounded, but right or wrong, it can lead to wage differentials, occupational segregation, or both. Recent empirical work indicates that intermittent work experience may result in lower current earnings because of deterioration of skills and forgone appreciation of earnings attributable to lost experience while out of the labour force. This explains why women who expect to be out of the labour market may opt for jobs where that deterioration is least and may thereby reinforce occupational segregation, cause overcrowding, and hence reduced wages.

Whatever the source of the earnings differentials, enforcement of the legislation may make the women who keep their jobs better off; others who may become unemployed, however, and who may have to compete for other women's jobs in the economy, possibly at lower wages, may be worse off. Furthermore, higher wages resulting from enforcement of the legislation may attract male competition for these jobs.

On the question of whether equal pay for work of equal value will achieve its objectives, Professor Edgecombe Robb suggested that it can help to correct anomalies in cases where the Human Rights Commission accurately diagnoses discriminatory differentials in wages. But it is an open question whether it can make substantial inroads in reducing these differentials, particularly since at present the principle exists only in the federal and Quebec legislations.

If, on the other hand, a large part of the differential is attributable to the segregation of males and females into jobs with *different* requirements and characteristics, then the impact will be smaller. In such cases, Professor Edgecombe Robb suggested, policies like equal opportunity, affirmative action, and contract compliance may be needed to change the occupational structure itself.

Fringe Benefits

The data do not exist to determine accurately fringe benefits by sex. Louise Dulude suggested, however, that what information is available indicates that the typical recipient of generous fringe benefits works for a large organization in a highly unionized industry. This description fits only about one-quarter of Canada's working women compared with 55 per cent of working men. Fringe benefits have grown more quickly than direct pay, which may mean that, contrary to what has been assumed, the total wage position of women relative to that of men may have been deteriorating.

The most important fringe benefit is pay for time not worked – that is, for vacations, holidays, and other time off. It accounts for as much as 10 to 20 per cent of employers' total labour costs. It seems safe to conclude that men benefit more than women because benefits such as longer vacations accompany higher status and seniority, both of which favour men. By contrast, most part-time employees are women; more than one-third of the part-time workers are not entitled to prorated vacations; and more than one-quarter do not get prorated holiday benefits. Louise Dulude suggested that labour laws should make mandatory the prorating of vacations and holidays for part-time workers.

Pension plans – private, as well as the Canada Pension Plan (CPP) and the Quebec Pension Plan (QPP) – account for about 5 per cent of employers' labour costs and are the next most important fringe benefit. The average male pensioner draws as much income from employment-related pensions as from Old Age Security and the Guaranteed Income Supplement, whereas the typical retired woman is much more dependent on government-paid pensions. As a result, elderly women's incomes are considerably lower than those of elderly men. While there is no significant evidence of sexual discrimination, it is suggested that there is discrimination because of family status. The effect is to exclude homemakers from government pensions. Women's groups have been working to change the homemakers' status in the CPP and QPP from that of dependants entitled only to surviving spouses' benefits to that of workers in their own right, who can contribute to the pension plan.

Other problems with pension plans result from women's inferior status in the paid labour market. Small numbers are eligible for private pensions. Low levels of benefits result from low incomes. Private pensions have limited portability because they tend not to be vested for ten years, and since women have a higher rate of turnover and drop out of the labour force more often than men, they are less likely ever to collect them. That is why a modified form of the CPP and QPP is recommended as the vehicle for improving women's employment pension plans.

Unemployment insurance is considerably less important in terms of costs than either pay for time not worked or pensions. Women's weekly benefits are less than two-thirds those of men because of their inferior position in the labour market. The unemployment insurance scheme discriminates by marital status; spouses, including those who work for their spouses on farms or in unincorporated or family businesses, are excluded from the scheme. Women are also disadvantaged by the clause that requires a longer waiting period for re-entrants because they tend to drop out of the labour force more frequently, as well as by the limitations on the availability of the scheme to part-time workers.

Louise Dulude concluded that without better information on fringe benefits by sex, we cannot have a clear idea of whether women in the labour force are gaining ground, falling back, or holding their own.

Christine Fagan also expressed concern about the lack of data that would enable analysts to use the total earnings package (including benefits), instead of just wages, when comparing the relative positions of individuals or groups within the labour force. Benefits are increasing. The data indicate that their costs for an average employee increased from around $500 in the early 1950s to nearly $9,000 in 1984; in that year they amounted to one-third of total payroll costs. While it is logical to assume, given the occupational distribution of men and women, that men have benefited more, additional data are needed to say by how much.

The extent of coverage by pension funds, indexing, and payments to the elderly poor are current problems of government pension plans. The proposals to extend pensions to cover homemakers are coming at a time when it is apparent that the contribution rate to the CPP and QPP will have to be raised if the fund is not to be exhausted in 20 years. Private pension plans are now concentrated in large firms, which makes it difficult for women to get full access to employer-sponsored schemes. Access could be improved, according to Christine Fagan, if the pension schemes designed by insurance companies specifically for small businesses were to become more generally available.

Technological Change

There is a general consensus that microelectronic technology will have a major impact on the employment of women. In 1982, according to Stephen Peitchinis, about 87 per cent of women were employed in service activities, many of which will be significantly affected by microelectronics and particularly by the development of computer networks and telecommunications technologies.

On the positive side, such networks can help to reduce frictional unemployment and improve the allocation of human resources. They can provide women who take leave from the labour force with the means of updating their skills and give them information about the labour market. The organization of work, too, may be affected: flexible hours may become more feasible as computer linkages increase and so may the choice of where to work – in an office, at home, or in a neighbourhood telematic centre.

We do not know what the results of technological change will be since it simultaneously destroys and creates products and processes, renders redundant some knowledge and skills, and requires new ones. The question is the *rate* of destruction and creation. Public policy should aim at facilitating transfers to alternative employment with a minimum lag. At the microeconomic level, technological change has brought about changes in structure and decreases in employment; at the macroeconomic level, the effects have been positive and employment-creating. The effects on employment are mainly indirect: historically, no technology, by itself, has been a major source of direct employment in its design, production, and operation. Instead, it contributes to increased productivity, decreased costs, and increased incomes, which lead to increased demand and an expansion in general economic and social activity. Professor Peitchinis expressed the view that the employment opportunities created by microelectronic technology appear increasingly to favour women.

Why, then, is there such pessimism concerning the effects on employment? Half a dozen reasons are suggested, among them the technological capacity of these new microelectronic instruments (which may be able to compete with human *intelligence* and not merely physical attributes, as in the past) together with the pervasiveness of the potential applications. Another is the fear that the rate of destruction of jobs may be greater than the rate of their expansion. As job creation declines in the service industry, will there emerge a fourth sector to pick up the slack? The information sector may be a candidate. Another reason is the fallacy of arguing, from particular examples of declines in employment in industries affected by technological advance, that aggregate employment must therefore decline.

Women, appropriately, are responding by acquiring more education and moving into nontraditional occupations. If they are to become more mobile upwards, they must participate in writing and interpreting the rules of progression. One difficulty is that most working women are not organized for collective bargaining or have not negotiated contracts that will protect them against unilateral management decisions relating to the effects of technological change on employment.

Lorna Marsden contended that Professor Peitchinis had passed too easily over women's concerns about the impact of technology. At the macroeconomic level, while technology on balance may create jobs, the question is *where*? In Canada or abroad? And in all regions of Canada? Women are less mobile than men. At the microeconomic level, there is concern not only over job loss, but also over job quality. The potential danger of downgrading the status and pay for such jobs raises the prospect that there may be no room for low-skill workers to advance to medium-skill jobs. She also expressed concern about the fact that as jobs are eliminated and downgraded, history will repeat itself and women will be affected first and most seriously.

The new technology *may* provide a means of teaching new skills or finding out about the labour market, as Professor Peitchinis suggested, but Senator Marsden was skeptical. She suggested that economists should look at a socioeconomic model: as social individuals, people prefer to learn in groups, rather than individually, from microelectronic instruments. The level of adult illiteracy in Canada is another barrier, and so, indeed, are the costs of such a service.

Dorothy Walters was the first panelist to discuss technological change. On balance she was pessimistic. She foresaw the job destruction that will occur in the service industries as microelectronic instruments become cheaper and more efficient. In many industries women will be affected first and most. The office revolution is pervasive, and it will continue to be associated with declining opportunities for women, even in rapidly growing industries like banking, insurance, real estate, hotels, and leisure services. The prospects are better in health and education. Jobs will also increase in high-tech industries, but they represent a relatively small part of total employment.

She argued that the changes brought about by technology are structural and should not be reversed. Moreover, Canada's productivity performance is lagging; technological change promotes productivity, which in turn promotes growth and creates new jobs. But that same technological change will disrupt employment in industries and occupations where women are concentrated. This is the dilemma. What is needed, perhaps, is to focus less on defensive tactics and to concentrate more on policies to ease the transformation.

James McCambly acknowledged that unions have been concerned about the way certain technological changes have been introduced in some places, but he suggested that they recognize that technology has tended to bring broad benefits to workers in the form of reduced hours of work, better working conditions, and a better security net. In his view, unions can help women to benefit from technological change. While the number of traditional jobs is declining, it is expected that of the jobs that will emerge as a result of technological change, proportionally more will offer opportunities to women.

Technological changes promise to eliminate some of the physical-strength barriers that have been built into certain jobs and should make work time more flexible. On the negative side are some potential ill effects, such as the boredom of some high-tech jobs. Of particular concern to unions is the displacement of workers in mid-career – women being at particular risk because they currently hold many of the repetitive jobs that technology is likely to eliminate. Many of these industries, like banking and retailing, are not highly unionized. If barriers to equal opportunity can be eliminated and if facilities and services for women workers can be improved, then technological advance holds the potential for major gains for workers.

François Paradis pointed out that it is impossible to foresee the vast range of possible new economic activities that could result from technological change, but it is easy to believe that the technological and informational era into which we are entering will create more jobs than it will destroy. Upheavals and major adjustments must occur, but they are necessary if our society is not to be left behind. He was optimistic about the impact on women who, having experienced the pervasive changes wrought by their liberation movement, are flexible enough to adapt to the new technology and find a better role in the new economic environment.

Large numbers of women are vulnerable to the drive for improved productivity based on technological change. Technology has the potential for both good and bad effects, and Ratna Ray underlined the need for public policy to nurture the good ones. In the federal jurisdiction, the main legislative instrument to facilitate adjustment is the Canada Labour Code, which encourages unions and management to negotiate on the issue of technological change. But the problem with labour legislation is that not much more than one-quarter of the women in the labour force are unionized.

Women in the federal public service remain concentrated in low-paying, dead-end jobs in the administrative-support categories. Since the primary focus of technological change will be general office productivity, women will be in the forefront of the productivity drive. Dr. Ray recommended that all government departments and agencies establish a committee to monitor policies relating to technological change to ensure that they are consistent with the Canadian Charter of Rights and that they do not have a disproportionate impact on women. Attention should be paid to such matters as training and retraining programs to enable women employees to cope with the new technology, ensuring adequate notice of technological change, enriching jobs, designing appropriate workstations, and monitoring the work environment to promote employees' well-being. Dr. Ray also recommended amendments to the Labour Code to provide assistance to women who are not members of unions.

Directions for Future Research

The role of the final panel was to point out the directions in which future research should go. Nina Colwill suggested a redoubling of our research efforts on equal pay for work of equal value. It should be made the focus of attention of many different disciplines, not just economics. Given a centuries-long legacy of placing a lower value on women than men and given an economy of sex-differentiated labour (where more than 95 per cent of the executives are male and more than 95 per cent of the secretaries are female), she argued that we need a new kind of research – research that assumes that there are ways to view the worth of work independently of the sex of the incumbent. Researchers must demonstrate the many ways in which the value of work in this country has been made a function of the sex of the worker, and they must focus on the criteria being used by those who set the values for various types of work. Only then will it be possible to know what male/female stereotypes have to be addressed in order to pave the way for gender-free treatment.

Walter Block expressed concern about legislating equal pay for equal work and equal pay for work of equal value. The effect of such legislation will be to replace market-determined wages by edicts of bureaucrats, lawyers, and judges. Wages then will no longer be a sign of consumers' demands, and the flexibility and efficiency of the economy will be reduced. The intent of such legislation is to eliminate employer discrimination, but, argued Dr. Block, discriminatory practices by profit-maximizing employers are not the explanation of income differentials. Such differentials are more likely to be the result of the way incomes of married couples are reported or the asymmetrical effects of marriage on incomes, or occupational choice by women, which may be affected by marriage or the prospects of marriage. Given the similarity in the earnings ratios of never-married women and never-married men, Dr. Block suggested that more research should be done on marital status as an explanation of the gap. He also advocated focusing research on finding an independent definition and measure of discrimination and abandoning the residual method of measuring it, which assumes that any male/female differential that cannot be accounted for by such variables as age, education, and labour force participation must be caused by discrimination.

According to Jennifer Stoddart, society does not pay attention to the economic role of women, but instead focuses almost exclusively on their social and cultural roles. The most obvious example of this is the fact that the economic value of work in the home has been ignored. She pointed out that economists have neglected many other aspects of the role of women in the production and consumption process. Prostitution, for example, has been treated as a health hazard or a public nuisance, but it has been virtually ignored by Canadian economists even though it is paid work that is a part of the contemporary service industry. The pornography industry is another subject that has not been regarded as a legitimate area of study. Little economic research has been done on daycare and parental leave or on the impact of divorce on the economic welfare of members of families, notwithstanding the fact that one-third of Canadian marriages end in divorce. Few studies have focused on maintenance and alimony payments in Canada or on the role of adolescent women as consumers or their conditions of work in the paid labour market.

It is important, not merely in terms of social justice, but also because it is fundamental to the formulation of appropriate social and economic policies, that the economic role of women be identified and become the subject of economic research. Economists, in building their models, must follow the principles of nonsexist research in order to avoid incorporating contemporary prejudices and possibly incorrect assumptions into their models.

Martha MacDonald's list of topics for future research included changes in the way work is organized and allocated among unpaid domestic work, paid work, and self-employment because these factors alter the economic position of women. We need to find out more about occupational diversification in existing jobs and new jobs, and to take a look at the jobs that are being transferred abroad. Technological changes and their effects on the quality of jobs and the allocation of low-skill and high-skill jobs also require research. To date, the individual has been used as the unit of analysis, but more attention needs to be focused on *family* employment and income patterns and on the ways paid labour, unpaid domestic labour, and self-employment are combined by the family unit. The effect of the state on male/female inequality and occupational segregation needs to be studied, and research should be broadened to include the impact on women not only of labour market policies not directly aimed at them, but of all economic policies, because they all affect the position of women.

Professor Ruth Rose-Lizée stated that unemployment is the fundamental problem of women in the marketplace and that research and policies must be directed first and foremost at the problem of creating jobs with decent working conditions. She argued that full employment is a precondition for any significant improvement in women's economic status and for the achievement of income parity. Policies like adequate provision for child care and parental leave are necessary if women are to achieve equality in the labour force. In addition, such policies provide a means of increasing employment. But Professor Rose-Lizée contended that focusing on these policies and on encouraging entry into nontraditional employment, or better training, or positive action, will have little effect unless there are strong policies to restore full employment.

Appendixes

A Unfamiliar Sources of Data from Statistics Canada

Prepared by Cécile Dumas

The increasingly active participation of women in the Canadian labour market is the subject of research in various social science fields. In the 1960s, analytical research was primarily concerned with the reasons why large numbers of women were entering or returning to the labour market. Now that more than half the female population are members of the labour force, interest is also being focused on their economic status in the labour market.

The economic status of a particular group of individuals is most often linked to their financial status. Analysis of such data may be enhanced by considering the impact of nonmonetary indicators. For example, an examination of such characteristics as an individual's education, occupation, and family responsibilities can widen the scope of research in this area.

This appendix was written in response to these needs. It is designed to be a handy guide for those who know little or nothing about the numerous sources of social and economic data offered by Statistics Canada.

The various sources of household survey data will be examined first, and in each case the type of sample used, the kind of information gathered, and the available formats for the information will be given.

There are other sources of survey information available – establishment-based surveys, for instance. The information collected from, say, manufacturers tends to be general and is often undifferentiated by sex. The primary interest of the surveys is macroeconomic: total production of goods and services, productivity by industry, and the cost of manpower in relation to the cost of capital.

Educational institutions, on the other hand, regularly supply detailed information on instructors' salaries and on full-time students. A relatively new source of information is the administrative files compiled by various government departments.

After this inventory of sources, which is by no means exhaustive, some difficulties associated with the aggregation of data will be discussed for the benefit of the reader.

This appendix would not be complete without listing the various divisions of Statistics Canada that can provide answers to the many questions not dealt with here because of space restrictions.

Household Survey Statistics

Main Sources of Data

The three main sources of information published by Statistics Canada on the economic status of women in the labour market are the Census, the Labour Force Survey (LFS), and the Survey of Consumer Finances (SCF). The first of these offers a wide range of data on the characteristics of the general population and the labour force. Information on the economic status of individuals and their families and households (i.e., income from various sources, occupation, and industry) is gathered at 10-year intervals. The other two surveys supply more specialized information on a monthly basis (LFS) and a yearly basis (SCF).

Statistics Canada offers both micro data tapes and cross-tabulations. Obviously, there are added costs involved in the preparation of special nonstandard tabulations. These vary according to production costs, which are a function of the type of data requested and the complexities involved in the preparation of tables.

Population Census

The Census is an exhaustive survey of all Canadians. Demographic information is solicited from the entire population (short questionnaire), while socioeconomic, cultural, and ethnic information is gathered from a sample population (long questionnaire).

Sample Design — All households[1] in remote areas, as well as some in collective-type dwellings, fill out the long questionnaire.[2] Elsewhere, sample households are chosen at random. The census enumerator assigns a number to households to which forms are distributed, starting with a previously selected random household. In 1981, for example, the sample rate was 20 per cent, so the selected household became number 1 and every fifth household following that number was given the long questionnaire.

The Census has been conducted by self-enumeration since 1971, although the sample size has varied.

It was 20 per cent in 1961, 33-1/3 per cent in 1971 and 1976, and 20 per cent in 1981. In 1986 it will also be 20 per cent.

Available Information — The most common way to obtain census data is through Statistics Canada publications. These are usually available in public and university libraries and may also be obtained through provincial governments.

Since 1961, a library of summary files (on magnetic tape) has been kept. They allow a computer to process a much larger set of variables linked to a highly refined geographic classification system. For those without access to a sufficiently powerful computer, the contents of the summary tapes are also available on microfiche in the form of cross-tabulations. The CANSIM[3] service looks after the distribution of summary tapes.

Public-use sample tapes are another source of data. These comprise three different micro data files (individuals, families, and households) based on 1 per cent of the census population. The first sample tape of this kind was derived from the 1971 Census. Another was prepared from 1976 data. In 1981, the number of variables and the number of geographical units were increased. The sample size for the file on individuals was increased to 2 per cent. The other two files (families and households) were integrated, although the individual components can still be identified. The 1981 tapes were to become available in the fall of 1984.

Requests for more complex data or more detailed cross-tabulations are handled by a team of consultants who have direct access to the micro data base. Their job is to help the user to arrive at a precise definition of his or her needs.

More specifically, these consultants have access to a data bank containing raw (unrounded) data from the 1971, 1976, and 1981 Censuses, and they can use these data to draw up original tabulations, as long as the reliability and confidentiality of the information are not compromised.[4] These tables can be presented on paper or on magnetic tape according to the user's technical specifications.

The Census is an extremely flexible data bank to work with because of the size of its sample and its large number of variables. The geographical framework can range from the entire country to provinces, to census divisions, to municipalities, right down to the actual enumeration areas.

Labour Force Survey

The Labour Force Survey is a monthly survey conducted on 56,000 Canadian households. It has undergone considerable revision since it was first introduced in 1945. Residents of the Yukon and Northwest Territories, persons living on Indian reserves, full-time members of the Canadian Armed Forces, and inmates of institutions are excluded from this survey.

Sample Design — Since most of the other household surveys are based on the LFS, its sample selection process will be described here in detail.

The selection of dwellings to be surveyed is made by random sampling based on a multistage probability stratification design.[5] These dwellings remain in the sample for six consecutive months and cannot be replaced during this period, even if information on a particular dwelling cannot be collected. The sample as a whole is divided into six replacement groups, so that each month one-sixth of the households in the sample are changed.

It is obvious that the reliability of the information collected will vary widely at the subprovincial level as a result of significant differences in population counts and the size of the corresponding sample.

Given the restrictions linked to the sample size and the sampling scheme, information on the main characteristics of economic regions may also be provided.[6]

LFS data relate to a particular week. Data collection is carried out the week after the reference week. Specially trained interviewers from Statistics Canada visit each sample dwelling personally the first month; subsequent interviews are carried out over the telephone, provided the respondent agrees.

Available Information — The purpose of the survey is to reflect the current state of Canadian labour market activity. The intensity of this activity is measured in conjunction with efforts related to finding work, in order that participation rates, unemployment rates, and employment/population ratios can be determined.

Information is collected on schooling, occupation, industry, time spent outside the labour force, hours worked, and reasons for absence from work. The demographic characteristics of household members are also available, as is their relationship to the head of the household and levels of educational attainment. This allows us to study, for example, the labour force activity of women in relation to that of their husbands, with or without the presence of children, by age group, etc.

Unpublished statistics are available in three forms:

– A system of microfiche containing principal summary statistics offers users more detailed cross-classifications of variables. Tabulations based on calculations using unrounded data are available on demand from the survey division.

- Summary tapes contain micro data from annual and monthly files.

- Original tabulations may be drawn up according to the user's specifications from the complete data bank.

The LFS is the most popular of all household surveys done by Statistics Canada. It acts as a vehicle for other surveys because of the size and composition of its sample, its reliability based on almost 40 years in the collection of socioeconomic and demographic data, and the fact that it is conducted at regular intervals.

Survey of Consumer Finances

This survey has been carried out every April since 1971. Its primary mandate is to record information on family and individual income earned during the year preceding the survey.

The LFS is the vehicle for this survey; therefore, information on incomes can be correlated with LFS data. The profiles of the respondent and household members are first established. For the purposes of this survey, only monetary income is considered. Data are available in current and constant dollars (time series).

The SCF sample size varies from year to year. Large samples were used in even-numbered years and small samples in odd-numbered years until the early 1980s. Starting with the 1983 survey, this past practice has been reversed. Thus data users have access to two consecutive large sample data bases, 1982 and 1983.

There is a difference between the large and small samples. The large samples represent two-thirds that of the LFS (37,500 households), while the small samples are chosen independently (about 17,000). Dwellings included in the small samples are selected according to the LFS sample design. Despite the difference in sample sizes, the same set of variables are available since the LFS questionnaire is attached to the income survey questionnaire in small sample years. The income questionnaire is filled in by the respondent, while the LFS questionnaire is filled in by the interviewer.

Additional questions are also added to those of the LFS in both cases so that other characteristics of the respondent can be correlated. These include, for example, date of arrival in Canada (if applicable), mother tongue, dwelling status (renter or owner with or without a mortgage), the number of weeks worked full-time or part-time, the number of weeks of unemployment, and other labour force activity during the previous year.

The Consumer Income and Expenditure Division has set up micro data files for the large sample years to allow in-depth study of certain characteristics.

Among the variables listed in these files, several are particularly useful for research related to the economic status of women in the labour market: the income of each spouse in economic and census families,[7] the total income of other family members, the number and age of children by school attendance level, the dwelling status, and, of course, labour market activity.

Micro data are divided into several files: economic family income, census family income, household income, and household facilities and equipment. Information on income is gathered for odd-numbered years (because the survey is conducted on even-numbered years); data on economic families are available from 1973, and on census families from 1971.

A new file, individuals with and without income, is available for two consecutive years (1981 and 1982). There is also a file on the income of economic families and unattached individuals (1976) and another on assets and liabilities of the same group (1977). This survey was repeated in 1984, and the results will be available in 1986.

CANSIM Services

The CANSIM system of Statistics Canada, which consists of a publicly accessible machine-readable data base and its supporting software, contains historical and current information for the most widely used economic statistics of Canada. The main base is kept up to date with the latest information, and its series may be obtained in the form of print-outs, microfiche, or magnetic tapes. For example, LFS monthly estimates are available through CANSIM as soon as they are issued.

Other Sources of Information

Family Expenditure Survey

This is one of the oldest surveys conducted by Statistics Canada. The first was carried out in 1937/38. It has been conducted on a regular but nonannual basis since 1953. (There were 12 such surveys carried out between 1953 and 1978.) The results have been principally used to determine the weighting factor in the Canadian consumer price index. Because of this, the sample was drawn only from large urban centres. The 1978 and 1982 surveys, however, covered units outside these centres. Micro data tapes are available for these two years.

The survey units[8] are selected individually from the list of LFS households. Unlike the SCF, however, the Family Expenditure Survey does not accompany the LFS form. The responsibility for the survey and for data dissemination rests with the Family Expenditure Section of the Consumer Income and Expenditure Division.

The information gathered by the survey reflects expenditure patterns of families according to income, family status, and place of residence. Other characteristics of family members are also surveyed, such as educational attainment, occupation of spouse, number of people working full-time, sources of income, etc.

Regular Special Surveys

Other less-well-known surveys have been carried out in the last few years. These special surveys are conducted by the Special Surveys Group (SSG) of Statistics Canada, whose role is to carry out studies of this kind (i.e., collecting data in areas outside the national program and its main statistical series). Most of these special surveys use the LFS sample for data collection. Some of their results can be linked with those of the LFS. Micro data tapes for the surveys described below are available from the SSG.

The Survey of Annual Work Patterns has been carried out on behalf of the Labour Force Survey Division each January since 1978. The size of the sample is five-sixths that of the LFS. Information related to the previous calendar year is compiled on three major activities: working, looking for work, and going to school. Results are available for the years 1977 to 1980 and for 1982. The year 1981 is excluded from the series because in that year the questionnaire was different.

The Survey of 1981 Work History, conducted in January 1982, is significantly different from the survey discussed above. The sample size was two-thirds that of the LFS, or approximately 34,000 households. The overall objective was to collect detailed information on all jobs held by the respondent during 1981 (to a maximum of four). For each job, respondents were asked to identify the months during which some work was done; the industry; the occupation and the class of worker (paid, self-employed, or unpaid family worker); the usual number of weeks, days, and hours worked; union membership; and earnings.

The Survey of Job Opportunities was conducted for the first time in March 1978. The questionnaire was revised the following year, and the survey has been carried out every year since, in March. In 1981 and 1984 the survey was conducted again in September. These two additional series (1981 and 1984) will be added to the six others (1979 to 1984).

This special questionnaire is distributed to all households in the LFS sample (about 56,000) and focuses on those persons who are not currently in the labour force. According to the terms of this survey, this group consists only of persons who wanted to work during the reference week but had not actively sought a job during the preceding four weeks.

The difference between this definition and that used in the monthly LFS should be noted. The latter survey measures the number of people who, while out of the labour force during the survey period, had looked for work during the previous six months, regardless of their intentions at the time of the reference week. This difference in definition explains why the number of people outside the labour force according to the special survey in March differs from the monthly estimates for that month.

The main focus of the Survey of Job Opportunities concerns the various reasons the person in question was not actively seeking a job, in decreasing order of importance (according to frequency of response). These include, for example, reasons related to the labour market, personal reasons, and other reasons. Other variables include the type of work desired and the person's willingness to move within or outside the home province if a suitable job offer were forthcoming.

Another survey deals with absence from work. This time series was first started in February 1976.

One-half of the LFS sample participates in this special survey. It is aimed at paid workers who were away from work for two consecutive weeks or more during the previous year as a result of illness, accident, or pregnancy. The questionnaire also asks if financial compensation was received and the number of weeks it was received.

Occasional Special Surveys

Other surveys are conducted on a less regular basis. One of these will be described below as an example. The reader is invited to contact the Special Surveys Group for further information on other surveys in this area.

The Child Care Survey was undertaken in February 1981 using one-third of the LFS sample. The last previous survey of this type had been carried out in 1973. The questionnaire solicited information on the arrangements made by the parents with respect to child care (for example, the amount of time spent by children in daycare facilities and the cost of the service). The gross household income during the previous year was also asked for.

Education Statistics

It has been noted on many occasions that there is a relationship between educational attainment and job opportunities. If one infers that a person's economic status is dependent on employment earnings, it follows that statistics on female enrolment in various educational institutions will be relevant to studies on their labour market activity.

The Education, Culture, and Tourism Division is responsible for collecting and disseminating statistical data among educational institutions and provincial governments.

There are many kinds of statistics collected. Each level is dealt with separately, and the focus is on either students or teaching personnel. Researchers investigating the status of women in teaching professions may find pertinent information here, including data on salaries, subjects taught, and demographic characteristics. Special cross-tabulations using different variables can be produced as long as data from at least four institutions are combined in order to protect confidentiality. Surveys in this area date from the early 1970s.

In 1984, Statistics Canada conducted three new surveys on Canadians on behalf of the Secretary of State. The first, which took place in January, was on adult education. Once again the LFS was used for data collection. Five-sixths of the respondents from the regular sample completed the questionnaire on the kinds of courses selected by adults.

The second of these surveys was carried out on a random sample of 70,000 postsecondary students enrolled in the fall of 1983 in regular courses at Canadian universities, community colleges, or the equivalent. Information was collected on the choice of study program, type of employment desired, source of financing for studies, etc.

The information was collected through questionnaires sent out by mail in February 1984. The data from this survey will be available sometime in the winter of 1985.

The final survey, called National Graduate Survey, was carried out on a random sample of 50,000 persons who had graduated from a university, technical institute, community college, nursing school, or trade school in 1982.

The graduates were interviewed by phone in June 1984. Data on their labour market experiences, two years after graduation, will be available in the spring of 1985.

Data Sources from Administrative Files

This source of information has been available to users outside Statistics Canada for some time. The Administrative Data Development Division is responsible for its dissemination.

These data must be considered "preliminary" for several reasons. First, they only cover part of the population. Only those who file income tax returns (Individual Income Tax File) or who receive family allowances (Family Allowance File) or unemployment insurance benefits (Unemployment Insurance Beneficiary File) are included. Second, the nature of the data varies according to changes in the laws and regulations governing these programs. Third, the concepts and definitions can be quite different from those used for household surveys and censuses.

These files have certain advantages, however, because geographic levels are defined in several different ways. The standard classification of regions according to federal electoral districts and census divisions corresponds to that of the Census. The postal code is the next piece of information to be written on the form, and the desired information can be obtained on the basis of postal code groupings. This procedure is particularly flexible when used for municipalities with home mail delivery, since data can be classified according to neighbourhood. Special tabulations based on these data can be produced.

Income Tax File

Demographic and economic information is available for each year between 1976 and 1982. Income is broken down by source. This file also allows the movement of people to be traced (internal, intraprovincial, interprovincial, and international migration).

Family Allowance File

This file contains information on all Canadian children (99 per cent) between the ages of 0 and 15, disaggregated by family size. Data for June 1981, 1982, and 1983 are presently available.

Unemployment Insurance Contribution File

This file is unquestionably the most difficult to use for time series analysis, mainly because of the numerous changes that have taken place in the statutes and regulations that govern the unemployment insurance program. For this reason, this file must be used with caution.

Besides basic demographic data, the file specifies on what grounds benefits were requested (normal, maternity, illness, fishermen's benefits, retirement, training, job sharing, or job creation) and also includes information on the person's earnings and occupation. Such administrative files can provide information that geographically is much more detailed than that offered by the LFS; however, the definition of "unemployed" as used here is different.

Aggregation Difficulties

The availability of a wide variety of statistical data that are accurate, pertinent, and up to date provides users with an indispensable analytical tool. Nevertheless, excellent instruments do not necessarily work excellently together. Musical instruments that are not tuned to each other produce only cacophony.

This analogy aptly describes the difficulties inherent in combining data from more than one source without making the necessary adjustments. There are several kinds of difficulties involved here. Some sources can simply never be reconciled, such as survey data and data from administrative files. The reasons for this should be obvious from the descriptions given in this appendix. On the other hand, there are other sources than can be "adjusted" to achieve compatibility (although never 100 per cent compatibility, unfortunately). For example, the geographic universe of the census can in some cases be adjusted to that of the LFS (for May or June of census years). The main concepts regarding the labour force are the same, although others are not.[9] The fact that most survey information is collected by sampling means that the different sample designs and sizes of the surveys, not to mention the different weighting systems, can create considerable difficulties when comparing data. The time and reference period of the survey also have an effect on how the results should be interpreted.

Incompatibilities may arise within a single source of data because of changes in the wording of questions or in the way data are processed. For example, the concept "head of household" was discarded at the time of the 1981 Census to be replaced by "household maintainer." This term refers to the member of the household who pays the rent, mortgage, etc. If this person does not live in the same dwelling as other members, the "Person 1" is automatically designated. It has been shown that in 94 per cent of Canadian households the same person fulfils the roles of both the person responsible for household payments and "Person 1." This simple change of definition has made comparisons difficult between 1981 Census data and data from 1971 and 1976.

A similar concept in the Survey of Consumer Finances – the head of family, who is the husband in a husband-wife family[10] – has not changed, however.

The same is true of the 1971 Census. Comparisons with 1981 Census data are possible, but a variable must be substituted in any special tabulation.

As for the LFS, it also uses the term "head" in reference to an economic family in order to establish family relationships, but this person does not have to be the man. An individual's family characteristics are decided on the basis of the presence or absence of a spouse. For example, data on gender reads as follows: "female heads or spouse of head, by presence and labour force activity of spouse" or "male heads. . . ."

Other data from the 1981 Census, however, have been adjusted for the purpose of conducting time studies – for example, income in 1971 dollars, occupation according to the 1971 classification and according to the 1981 classification, and others too numerous to mention here.

The results of special studies that use the LFS as a vehicle to collect their data cannot always be linked to LFS data. In most cases, the special-study questions deal with another time frame (labour force activity and/or income in the previous year), while the LFS basically measures activity in the reference week.

For all these reasons, caution must be exercised when selecting statistical data from different sources. Every publication that presents the results of a survey done by Statistics Canada contains a very important section entitled "Notes and Definitions," where the technical aspects of the statistical data are explained and some advice is offered as to their interpretation. It should be noted, however, that the LFS and certain special surveys have retained the same questionnaire for several years, so that studies of changes in Canadian labour market activity over time are indeed possible. There are also a number of census variables whose definitions have not changed over time and that can be used in time studies.

Lastly, the reader is reminded that Statistics Canada offers the services of special consultants to users who wish to learn more about survey methods and data interpretation.

Additional Information

This last section lists the divisions responsible for the various sources of Statistics Canada data mentioned in this appendix. The address and telephone

Source	Division	Format	Telephone
Census of Canada	CANSIM Dissemination Services (RHC)[1]	Summary tapes and public-use sample tapes	990-8207
	Central Inquiries Service (RHC)	Microfiche	990-8198
	Customer Services Section - Census Operations (JT)[2]	Special tabulations	990-9534
Labour Force Survey	Labour Force Survey Data Dissemination and Current Analysis (JT)	Micro data tapes and special tabulations	990-9448
Survey of Consumer Finances	Consumer Income and Expenditure Division - Data Dissemination (JT)	Micro data tapes and special tabulations	990-9775
Family Expenditure Survey	Consumer Income and Expenditure Division - Family Expenditure (JT)	Micro data tapes and special tabulations	990-9781
Special Surveys Group	Special Surveys Division (JT)	Micro data tapes and special tabulations	990-9475
Education	Education, Culture, and Tourism Division (RHC)	Special tabulations	990-8283
Administrative files	Administrative Data Development Division (JT)	Special tabulations	990-9723

[1] RHC - R. H. Coates Building.
[2] JT - Jean Talon Building.

number of each are noted, as well as the format in which the information is available. The list covers only unpublished data, since the *Statistics Canada Catalogue*, published annually, lists all catalogued publications dating from the last 10 years.

There are nine regional offices across Canada and a Central Inquiries Service in Ottawa. All these offices can be reached toll-free by telephone. The addresses and telephone numbers of these offices are found in the catalogue mentioned above.

B Selected Bibliography*

Prepared by the Women's Bureau, Labour Canada

Affirmative Action

Canadian Human Rights Commission. *Special Programs in Employment: Criteria for Compliance*. Ottawa: Supply and Services Canada, 1981 (25 pages; bilingual; Cat. HR21-8/1981; free). This booklet clarifies criteria for special programs in employment under the jurisdiction of the Canadian Human Rights Act.

Kinsella, Noel. *A Renewed Federal Contracts Program: An Instrument for Progressive Affirmative Action*. Affirmative Action Division. Ottawa: Employment and Immigration Canada, 1979 (18 pages; English/French; B-11; free). This paper explores the use of granting federal government contracts as a vehicle to ensure that women and other disadvantaged groups have equal opportunity and access to entry-level positions, training, and promotions.

Phillips, D. Rhys. *Affirmative Action as an Effective Labour Market Planning Tool of the 1980's*. Task Force on Labour Market Development, Technical Study No. 29. Ottawa: Employment and Immigration Canada, 1981 (69 pages; English; Cat. MP15-4/29-1981E, out of print). This research paper is an examination of the effectiveness of affirmative action as a labour market strategy to combat employment discrimination. The study accomplishes this task by defining the problem, describing the impact that affirmative programs will have on the labour market and their implications, and analysing Canadian affirmative-action policy initiatives.

Status of Women Canada. *Towards Equality for Women*. Ottawa: Supply and Services Canada, 1979 (42 pages; bilingual; Cat. SW21-3/1979; free). This booklet outlines the federal government's commitment to women to equalize opportunities and ensure progress through a series of specific changes to government legislation, policies, and programs. The booklet also contains a series of proposals for change in areas under federal jurisdiction. Among those included are employment and economic development strategies.

Townson, Monica. *The Management of Affirmative Action in Hard Times: The Implications of the Current Economic Recession for Affirmative Action Programs*. Affirmative Action Division. Ottawa: Employment and Immigration Canada, May 1983 (44 pages; English/French; B-15; free). This paper investigates the impact of the current recession on affirmative action programs by initially examining the extent of employment decline in various Canadian industries, occupations, and regions and outlining the prospects for economic recovery. In addition, included is a useful discussion of the response by employers to the recession, the ways in which layoffs have been implemented, and the implications for affirmative action programs. The paper concludes by suggesting that the survival of affirmative action programs may depend on policy changes to ensure that these programs reflect the current and future economic environment.

Treasury Board Canada. *Affirmative Action Press Kit*. Affirmative Action Personnel Policy Division. Ottawa: Treasury Board Secretariat, 1983 (bilingual; free). This kit contains information regarding the federal government's affirmative-action policy guidelines, statistical data on the representation of the three target groups – women, indigenous people, and handicapped persons – and a summary of measures taken by Treasury Board and the Public Service Commission to support employment of the three target groups.

Aging

Dulude, Louise. *Women and Aging: A Report on the Rest of Our Lives*. Ottawa: Canadian Advisory Council on the Status of Women, April 1978 (123 pages; English/French; free). A comprehensive report for women on the effects of aging, with emphasis on the economic position of women in widowhood, divorce, separation, and retirement. Lack of money is shown to be a serious problem for aging women, especially those with little or no private pension plans or savings. The paper examines how such a situation occurs and what might be done to help remedy it.

Health and Welfare Canada. *Fact Book on Aging in Canada*. Second Canadian Conference on Aging, October 24-27, 1983. Ottawa: Supply and Services Canada, 1983 (87 pages; bilingual; free). A clear and concise statistical resource book that demonstrates various aspects of the lives of the aged, including income, sources of income, labour force participation, type of employment, living arrangements, and so on. Comparisons between men and women are incorporated.

———. *Canadian Governmental Report on Aging*. Ottawa: Public Affairs Directorate, 1982 (168 pages; English/French; Cat. H21-89/1982E; free). A federal, provincial, and territorial effort, providing a thorough overview of the developments concerning an evolving aging population in Canada. Throughout the book, considerable attention is paid to the economic status of older individuals, with specific references to the problems

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* Federal publications released before October 1, 1984.

facing women. Issues and current policies and programs concerning income security, pension coverage, portability and vesting, employment, health care and services, living arrangements, and so on, are discussed. The publication concludes by stressing the need for increased training and education with respect to aging as well as further research to aid in policy planning and to help in identifying and resolving problems surrounding the aged.

NATIONAL COUNCIL OF WELFARE. *Sixty-Five and Older*. Ottawa: Supply and Services Canada, 1984 (76 pages; English/French; Cat. H68-11/1984E; free). A good statistical portrait of the elderly in Canada, this publication examines the past and future growth of Canada's aged population and charts trends in poverty and income statistics, along with a discussion of shelter costs, subsidies and services, and the impact of income security programs. In addition to addressing the economic condition of elderly Canadians in general, the report also makes specific comparisons between the sexes. Even though the overall economic condition of the aged has improved over the last two decades, this report points out that elderly women – and, in particular, those living on their own – continue to be faced with a much higher risk of poverty and live on considerably lower incomes than most Canadians and many of their male counterparts.

STATISTICS CANADA. *The Elderly in Canada*. Ottawa: Supply and Services Canada, April 1984 (bilingual; Cat. 99-932; $5.50). This is a brief and rather general summary of the major trends and patterns regarding the elderly population in Canada, including marital status, living arrangements, education, income, labour force participation rates, and so on. Of importance is not only the rapid increase of the elderly population as a whole but also the pronounced growth rate of the elderly female population in comparison with the elderly male population. As well, the statistics show the significant differences between the sexes with regard to income and labour force participation.

Civil Service

CANADIAN ADVISORY COUNCIL ON THE STATUS OF WOMEN. *Women in the Public Service: Overlooked and Undervalued*. Ottawa, October 1980 (62 pages; English/French; free). This report analyses the status of female federal public servants in 1979 and the impact that government restraint has, and will have, on such female employees. In addition, a prescription to remedy the unequal situation of women in the public service is offered.

WHITE, Julie. *Current Issues for Women in the Federal Public Service*. Ottawa: Canadian Advisory Council on the Status of Women, May 1983 (24 pages; English/French; free). The federal government is the largest single employer of women in Canada. The vast majority of these women continue to be located in lower-paid clerical and secretarial jobs, while men dominate the executive, technical, scientific, and professional occupations. This research paper examines this and other issues related to the situation of women government employees, along with the impact of various federal government policies and initiatives undertaken.

Daycare

PALTIEL, Freda L. *et al*. *Day Care for Children: International Perspectives*. Ottawa: Health and Welfare Canada, November 1982 (39 pages, English). This background paper was prepared for the Interdepartmental Committee on daycare. The report undertakes the task of reviewing the status of daycare and the policies and programs provided by a selected group of other countries.

SHAW, Susan. *Better Day Care for Canadians: Options for Parents and Children*. Ottawa: Canadian Advisory Council on the Status of Women, August 1982 (43 pages; English/French; free). This research paper contains an overview of the current daycare situation in Canada, cites relevant research, and discusses issues such as needs, availability, funding, and quality of daycare. The paper also provides insight into the establishment of a new Canadian daycare system.

STATISTICS CANADA. *Initial Results from the 1981 Survey of Child Care Arrangements*. Labour Force Activity Section. Labour Force Survey Research Paper No. 31. Ottawa: Supply and Services Canada, 1982 (49 pages; bilingual; Cat. 86-X-501; $5.00). This research paper presents a statistical portrait of child care arrangements across Canada. It is based on the Child Care Supplement to the Labour Force Survey in February 1981. Among the statistical data offered are the type, cost, and quantity of child care; characteristics of the mother; reasons for choosing the type of child care; and so on.

Discrimination

DENTON, Margaret and HUNTER, Alfred. *Economic Sectors and Gender Discrimination in Canada: A Critique and Test of Block and Walker . . . and Some New Evidence*. Women's Bureau. Discussion Paper Series A, No. 6: Equality in the Workplace. Ottawa: Labour Canada, 1984 (59 pages; English/French; Cat. L24-1108/84E; free). This research paper critically assesses the theories advanced by the authors in Block and Walker's collection of papers on gender and racial/ethnic discrimination in the labour market. It also empirically tests those arguments with analysis of male/female earnings differentials. The study concludes with an examination of alternative theories of gender wage discrimination and with repudiation of some of the arguments advanced by the authors in Block and Walker's collection.

GUNDERSON, Morley and REID, Frank. *Sex Discrimination in the Canadian Labour Market: Theories, Data and Evidence*. Women's Bureau. Discussion Paper Series A, No. 3: Equality in the Workplace. Ottawa: Labour Canada, 1983 (77 pages; English/French; Cat. L39-21/3-1983E; free). This research paper is concerned with sex discrimination and male/female earnings differentials. A thorough examination of the various theoretical models of sex discrimination is presented, along with a critical analysis of the various data sources used to test these theories. The final section concludes with a discussion of a possible research agenda based on existing and new data.

JAIN, Harish C. *Race and Sex Discrimination in the Workplace: An Analysis of Theory, Research and Public Policy in Canada*. Affirmative Action Division. Ottawa: Employment and Immmigration Canada, March 1981 (86 pages; English/French; B-10; free). This research paper provides an overview of sex and race discrimination in employment, with an analysis of some of the theories, Canadian legislation, and decisions rendered by courts and boards of inquiry.

SECRETARY OF STATE. *Convention on the Elimination of All Forms of Discrimination against Women*. Ottawa: May 1983 (406 pages; English/French; Cat. S2-104/1983E; free). This is the first report on the progress of the measures taken by the federal, provincial, and territorial governments of Canada to implement the provisions of the convention.

Earnings

GUNDERSON, Morley and REID, Frank. *Sex Discrimination in the Canadian Labour Market*. See section entitled "Discrimination."

ORNSTEIN, Michael D. *Accounting for Gender Differentials in Job Income in Canada: Results from a 1981 Survey*. Women's Bureau. Discussion Paper Series A, No. 2: Equality in the Workplace. Ottawa: Labour Canada, 1983 (51 pages; English/French; Cat. L39-21/2-1983E; free). Using data from a sample survey carried out by the Quality-of-Life Project at York University in 1981, this research study presents good analysis and insight into the debate concerning the differences between men's and women's job incomes. In addition, some examination and some suggestions are offered concerning policies affecting the earnings position of women.

———. *Gender Wage Differentials in Canada: A Review of Previous Research and Theoretical Framework*. Women's Bureau. Discussion Paper Series A, No. 1: Equality in the Workplace. Ottawa: Labour Canada, 1982 (57 pages; English/French; Cat. L39-21/1-1982E; free). This research paper provides both a review of empirical research addressing the issue of gender wage differentials and a critical examination of the several theoretical explanations that have developed over the years.

ROSENFELD, Rachel A. "Sex Differences in Socioeconomic Achievement: An Overview of Findings and Explanations." In *Reflections on Canadian Incomes*, pp. 382-99. Selected papers presented at the Conference on Canadian Incomes, Winnipeg, May 10-12, 1979. Economic Council of Canada. Ottawa: Supply and Services Canada, 1980 (English/French; Cat. EC22-78/1980E; $17.50). This is an investigation into the various findings and theories addressing the issue of income differentials between women and men. The paper concludes with the argument that equal-pay and equal-opportunity legislation will fail to be effective in narrowing the earnings gap unless other needs important to women, such as child care, better labour organization, and affirmative action, are further developed.

STATISTICS CANADA. *Hourly Earnings Data from the Survey of 1981 Work History*. Labour Force Activity Section, Research Series No. 38. Ottawa: February 1984 (77 pages; bilingual; Cat. 71-X-512; occasional; $6.00). A statistical portrait of earnings compiled from the Survey of 1981 Work History, a supplement to the January 1982 Labour Force Survey. Male and female average hourly earnings are compared across a number of job-related characteristics, such as industry group, full-time or part-time, educational attainment, and unionization.

———. *Earnings of Men and Women, Selected Years 1967 to 1979*. Ottawa: Supply and Services Canada, 1981 (94 pages; bilingual; Cat. 13-577; occasional; $7.00). This is a strictly statistical, nondescriptive analysis of earnings distributions for men and women. The data are primarily derived from surveys of consumer finances and include tabulations on occupational groupings, age, education, full-time and part-time workers, and so on.

WOMEN'S BUREAU, LABOUR CANADA. *Women in the Labour Force: Part II – Earnings*. Ottawa: Supply and Services Canada, 1984 (70 pages; bilingual; Cat. L24-1168/84B; regular publication; free). This is the second part of a three-part series. It is an annual publication that provides statistics on women in the labour force.

Education and Training

CANADIAN ADVISORY COUNCIL ON THE STATUS OF WOMEN. "Critical Skill Shortages: New Opportunities for Women." Ottawa, January 1981 (29 pages; English/French; free). This brief presented to the Parliamentary Task Force on Employment Opportunities for the 80's takes a critical look at federal employment programs relating to occupational training for women and offers suggestions for program improvements.

COHEN, Leah. *A Review of Women's Participation in the Non-Traditional Occupations*. Task Force on Labour Market Development. Technical Study No. 8. Ottawa: Employment and Immigration Canada, 1981 (27 pages; English; Cat. MP15-4/8-1981E; free; out of print). This research paper criticizes current federal employment policies to promote and encourage women's entry into nontraditional occupations and explains why such programs have continued to direct women into traditional female occupations and have failed to bring in significant numbers of women into nontraditional apprenticeships and/or skilled trades. The study concludes by offering suggestions for program improvement.

DEVEREAUX, M. S. and RECHNITZER, Edith. *Higher Education: Hired?* Education, Science, and Culture Division, Statistics Canada. Ottawa: Supply and Services Canada, 1980 (212 pages; English/French; free; out of print). Based on a 1978 Statistics Canada survey, this research study provides a useful exploration of the sex differences in employment characteristics of university and college graduates for 1976.

FERGUSON, Janet. *Who Turns the Wheel?* Ottawa: Science Council of Canada, 1982 (136 pages; English/French; Cat. SS24-18/1982E; free). This is a publication of the proceedings of a 1982 workshop on the science education of women in Canada. The papers contained within discuss sex differences in enrolments and achievement in science; and the serious problems these present; consider research on why these differences occur; and suggest strategies involving educators and policy makers.

GASKELL, Jane. "Education and Job Opportunities for Women: Patterns of Enrolment and Economic Returns." In *Women and the Canadian Labour Force*, edited by Naomi Hersom and Dorothy E. Smith, pp. 257-306. Ottawa: Social Sciences and Humanities Research Council of Canada, February 1982 (English; Cat. CR22-9/1981E; free; out of print). This research paper explores the ways in which women's education contributes to their unequal position in the labour force by looking at the type and amount of education women receive and the economic returns gained from the types of job and incomes earned in comparison with men.

———. "Training, Education and Socialization." In *Sexual Equality in the Workplace*, pp. 93-122. Proceedings of a conference held in Toronto in 1982. Women's Bureau. Ottawa: Labour Canada, 1982 (English/French; Cat. L38-36/1982E; free). By presenting a brief overview of the literature and some useful tables, this paper discusses the socialization, education, and training of women, and how these combine to affect the status of women in the labour force.

Equal Pay

ALEXANDER, Judith. "Equal-Pay-for-Equal-Work Legislation in Canada." Discussion Paper No. 252, Economic Council of Canada, Ottawa, March 1984 (81 pages; English/French; free). This paper describes the current Canadian equal-pay legislation and provides an in-depth discussion of arguments by opponents of the principle of equal pay for work of equal value.

CANADIAN HUMAN RIGHTS COMMISSION. *Equal Pay for Work of Equal Value*. Ottawa: Supply and Services Canada, 1983 (8 pages; bilingual; Cat. HR21-9-1981; free). This publication is a guidebook for interpreting Section 11 of the Canadian Human Rights Act and provides information about the principle of equal pay for work of equal value.

———. *Methodology and Principles for Applying Section 11 of the Canadian Human Rights Act*. Ottawa: 1980 (15 pages; bilingual; free). This is a working paper designed for employers and employees to help them understand the concept of equal pay. It touches briefly on the basic procedure for investigation and conciliation of complaints relating to Section 11 of the Canadian Human Rights Act.

———. *Equal Pay Casebook, 1978-1983*. Ottawa: 1984 (11 pages; bilingual; free). This publication contains texts of the Canadian Human Rights Commission's news releases and excerpts from the Commission's Summary of Decisions on cases relating to equal pay for work of equal value.

NIEMANN, Lindsay. *Wage Discrimination and Women Workers: The Move towards Equal Pay for Work of Equal Value in Canada*. Women's Bureau. Discussion Paper Series A, No. 5: Equality in the Workplace. Ottawa: Labour Canada, 1984 (121 pages; English/French; Cat. L24-1048-83E; free). A clearly written overview of federal wage policy and wage legislation relating to women workers in Canada, along with a review of the development of the principle of equal pay for work of equal value. In addition, the research paper examines the application of the equal-value provision of the Canadian Human Rights Act and concludes with some suggestions for improving the application and impact of equal-value provisions.

Homemakers

CANADA PENSION PLAN ADVISORY COMMITTEE. *More Effective Participation of Homemakers in the Canada Pension Plan: Majority and Minority Reports to the Minister of National Health and Welfare*. Ottawa: March 1983 (48 pages; bilingual; available from Income Security Program Branch, Health and Welfare Canada, free). The majority report examines the status of homemakers and their present treatment in the Canada Pension Plan. The paper also contains concise summaries of the arguments surrounding three major proposals offered to improve the situation and recommends implementation of a special homemakers' pension, mandatory splitting of CPP credits of all spouses, and implementation of the "child care drop-out" provision. In the minority report, a dissenting viewpoint with respect to a special pension for homemakers is presented.

MCPHERSON, Kathleen. *A 'Round the Clock' Job: A Selected Bibliography on Women's Work at Home in Canada*. Workshop Report. Ottawa: Social Sciences and Humanities Research Council of Canada, 1983 (45 pages; English; Cat. CR22-19/1983E; free). This bibliography includes a number of selected books, theses, articles, government publications, and audio-visual materials pertaining to work performed in the domestic sphere by Canadian women.

NATIONAL COUNCIL OF WELFARE. *Better Pensions for Homemakers*. Ottawa: Supply and Services Canada, 1984 (49 pages; English/French; Cat. H68-14/1984E; free). This report criticizes the idea of a special pension for homemakers, as proposed by the Parliamentary Task Force on Pension Reform. After briefly reviewing the situation of homemakers in the present pension system, this paper systematically explains what is wrong with the special pension for homemakers, illustrates the flaws and inequalities of the proposal, and offers an alternative that would provide homemakers with better retirement income.

PROULX, Monique. *Five Million Women: A Study of the Canadian Housewife*. Ottawa: Canadian Advisory Council on the Status of Women, June 1978 (92 pages; English/French; free). An examination of the social and economic status of women who work within the home. The paper looks at the issues concerning salaries and pensions for homemakers and reviews some economic and time-evaluation studies on household work.

Immigrant Women

HUSAINI, Zohra. *A Research Report on the Needs of Immigrant Women of Edmonton*. Edmonton (Alta.): 1983 (182 pages; English; available from the Multiculturalism Directorate, Secretary of State Canada, free). This report is a socioeconomic profile of immigrant women in Edmonton. It provides an assessment of their needs, including adaptation, education, and employment, and examines the kinds of assistance and services available. An overview of centres/organizations for immigrant women across Canada is also included, along with a summary of recommendations to improve the situation of immigrant women.

INTERNATIONAL COALITION TO END DOMESTICS' EXPLOITATION. "Implementation of the Special Policy on Foreign Domestic Workers: Findings and Recommendations for Change." A brief to the Minister of Employment and Immigration Canada, Ottawa, March 1983 (71 pages; bilingual; Cat. WH5-043B; free). This brief calls attention to the difficulties surrounding the implementation of the new immigration policy with respect to domestic workers. Issues concerning the interpretation and application of the new policy, such as referrals to local CEC's, skills upgrading, wages and working conditions, assessment criteria, and so on, are highlighted. A summary of 35 recommendations to improve the situation is included.

MCLEOD-ARNOPOULOS, Shiela. *Problems of Immigrant Women in the Canadian Labour Force*. Ottawa: Canadian Advisory Council on the Status of Women, January 1979 (79 pages; English/French; free). This research paper provides a clearly written overview of the situation of immigrant women in the Canadian labour market, concentrating on the garment and textile industries, and domestic workers. Federal and provincial policies and legislation affecting immigrant women at work are examined.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. *Integration of Immigrant/Migrant Women into the Canadian Labour Market*. National Report of Canada to the Working Party on Migration and the Working Party on the Role of Women in the Economy. Ottawa: Employment and Immigration Canada, May 1981 (44 pages; English; free). This research report is a good description of the status of immigrant women in the Canadian labour market. Focusing on comparisons with native-born Canadian women as well as immigrant men, the study examines occupational distributions, earnings, unemployment, and education. A critical discussion of language training policies and governmental services for immigrants is included.

RICHMOND, Anthony H. and KALBACH, Warren E. *Factors in the Adjustment of Immigrants and Their Descendants*. Ottawa: Statistics Canada, January 1980 (481 pages; English/French; Cat. 99-761E; $7.50). This research study, utilizing 1971 Census data, provides information and insights with respect to the adjustment of immigrants and their descendants. Some discussion and relatively small amounts of information specifically addressing immigrant women are incorporated.

SECRETARY OF STATE. *The Immigrant Woman in Canada: A Right to Recognition. Part 2: Recommendations from the Conference, Toronto, March 20-22, 1981*. Ottawa: Supply and Services Canada, 1981 (27 pages; bilingual; Cat. MUL-21-B; free). This publication contains a summary of recommendations to improve the status of immigrant women in Canada.

Labour Force Activity

ARMSTRONG, Pat and ARMSTRONG, Hugh. *A Working Majority: What Women Must Do for Pay*. Ottawa: Canadian Advisory Council on the Status of Women, February 1983 (280 pages; English/French; Cat. LW31-11/1983E; $4.95). This book provides an insight into the nature and conditions of work that women do for pay. Utilizing labour force statistics and the information received from the experiences of a small sample of women interviewed, the study explores such issues as occupational and industrial segregation, wages and benefits, unemployment, job tenure, unions, and technology. Chapter 3 focuses on the daily work process as seen through the eyes of these women and provides further insight into the consequences of new technology, job security, sex-role expectations, and so on. The book concludes with urgings of fundamental changes in the nature and conditions of women's paid work and recommends changes in government programs, legislation and enforcement, and employer practices.

BOULET, Jac-André and LAVALLÉE, Laval. "Women and the Labour Market: An Analytical Framework." Discussion Paper No. 207. Ottawa: Economic Council of Canada, December 1981 (204 pages; English/French; free; out of print). A paper of proposals for practical research projects on the study of women in the labour market. A useful bibliography is also included.

BOYD, Monica. "Occupational Segregation: A Review." In *Sexual Equality in the Workplace*, pp. 66-92. Women's Bureau. Ottawa: Labour Canada, 1982 (English/French; Cat. L38-36/1982E; free). This paper presents a concise overview of occupational segregation, examining the definitions, the extent of occupational segregation by sex in the Canadian labour market, the effects of such segregation, and some of the theories used to account for occupational segregation. This paper concludes by briefly identifying some of the major strategies to desegregate occupations.

BRETON, Albert. *Marriage, Population, and the Labour Force Participation of Women*. Economic Council of Canada. Ottawa: Supply and Services Canada, March

1984 (31 pages; English/French; Cat. EC22-117/1984E; $4.95). This report argues that the unequal status of women in the labour market can be attributed to the structure of marriage markets (traditional versus modern). In addition, it suggests that any policies to improve the situation of women in the labour force should be aimed at promoting the modern marriage market by facilitating and maintaining women's labour force participation through improvements to such areas as daycare, parental leave, and so on.

COHEN, Leah. *A Review of Women's Participation in the Non-Traditional Occupations*. See section entitled "Education and Training."

DALE, Patricia. *Women and Jobs: The Impact of Federal Government Employment Strategies on Women*. Ottawa: Canadian Advisory Council on the Status of Women, June 1980 (161 pages; English/French; free). An in-depth review of federal employment strategies and labour market policies as they relate to women. The final section of the research paper discusses an employment strategy for women that departs from traditional employment policy approaches and argues for new policy directions oriented towards improving the economic position of women by taking into consideration their special needs and family responsibilities.

ECONOMIC COUNCIL OF CANADA. "Women and Work: Opportunity for Choice." In *On the Mend*, pp. 81-93. Twentieth Annual Review. Ottawa: Supply and Services Canada, 1983 (English/French; Cat. EC21-1/1983E; $5.95). A brief insight into the socioeconomic position of women in the labour force, largely supported by data from the 1981 Census. Among the issues discussed are labour force participation, earnings, education, and training.

HERSOM, Naomi and SMITH, Dorothy E. *Women and the Canadian Labour Force*. Working Document. Ottawa: Social Sciences and Humanities Research Council of Canada, February 1982 (588 pages; English; Cat. CR22-9/1981E; free; out of print). This book is a collection of papers and proceedings presented at a workshop held at the University of British Columbia in January 1981 to evaluate strategic research needs of women and the Canadian labour force. The papers introduce and analyse important data, review research, raise issues, and present policy options regarding women's relation to the labour force. Included also is a list of areas targeted for further research, along with a number of recommendations regarding the installation and organization of such research.

MCKAY, Margaret. *Women in the Labour Force with an Emphasis on the Clerical and Service Occupations: A Selected Bibliography*. Working Document. Ottawa: Social Sciences and Humanities Research Council of Canada, 1982 (59 pages; English; Cat. CR22-15/1982E; free). This bibliography includes a number of references to books, journal articles, monographs, and research papers written in Canada, the United States, and other countries on the subject of women in the labour force. The focus of the bibliography is women in clerical and service occupations.

PEARSON, Mary. *The Second Time Around: A Study of Women Returning to the Work Force*. Ottawa: Canadian Advisory Council on the Status of Women, 1979 (69 pages; English/French; free). This research paper examines the typical two-phase working pattern of many women who interrupt their work in the paid labour force in order to bear and rear children. The study describes the motivations of such women – largely economic – and the difficulties they face upon return, including employment skills, attitudinal barriers on the part of employers, and child care. In addition, suggestions are offered to assist in the alleviation of such problems.

STATISTICS CANADA. *Women in the World of Work*. 1981 Census of Canada. Ottawa: Supply and Services Canada, 1984 (25 pages; bilingual; Cat. 99-940; $5.50). This publication provides a nontechnical, summary profile of women in the labour force, based on 1981 Census information.

SWAN, Carol. *Women in the Canadian Labour Market*. Task Force on Labour Market Development, Technical Study No. 36. Ottawa: Employment and Immigration Canada, 1981 (89 pages; English; Cat. MP15-4/36-1981E; free; out of print). This is a clearly written review of the situation of women in the Canadian labour market. The study analyses the socioeconomic context of women's labour force involvement and the barriers they face in participating equally in that market. The paper concludes by suggesting future programs and policy directions away from individual aspects of labour supply to an emphasis on the structural aspects of labour demand, such as training, job creation, and employer incentives to help women move into nontraditional occupational areas.

TASK FORCE ON LABOUR MARKET DEVELOPMENT. *Labour Market Development in the 1980's*. Ottawa: Employment and Immigration Canada, July 1981 (243 pages; English/French; Cat. MP15-3/1-1981E; free; out of print). This Task Force report presents an analysis of labour market trends and policy directions for the 1980s, based on previous analytical work by the federal and provincial governments and on a collection of commissioned technical studies. Chapter 6 of the report discusses employment difficulties of particular target groups, including women, and suggests policies and programs to assist in overcoming labour market problems.

WOMEN'S BUREAU, LABOUR CANADA. *Sexual Equality in the Workplace: Proceedings of a Conference*. Ottawa: Supply and Services Canada, 1982 (152 pages; English/French; Cat. L38-36/1982E; free). This publication is a collection of papers, comments, and addresses presented at a 1982 conference in Toronto on sexual equality in the workplace. Representatives from the business community, organized labour, government, academics, and some interest groups discussed some of the factors behind the current situation of women in the workplace, including occupational segregation, equal pay, socialization, education, job training, and the identification of barriers to working women, such as child care and parental leave. The proceedings also include some thoughts about what might be done to improve the conditions and opportunities for working women.

———. *Women in the Labour Force: Part 1 – Participation*. Ottawa: Supply and Services Canada, 1983 (88 pages; bilingual; Cat. L24-1068/81B; annual publication, free). This publication, which is the first in a three-part series, contains data for 1980 and 1981 on the participation of women in the Canadian labour force. The statistical tables include information by sex, age, marital status, and geographic region on employment, unemployment, part-time work, hours worked, and absenteeism. Also included are comparisons of male and female labour force distributions according to occupational categories and industries.

———. *Women in the Labour Force: Part III – A Variety of Facts and Figures*. Ottawa: Supply and Services Canada, 1983 (54 pages; bilingual; Cat. L38-30/1983-3; annual publication; free). This is the final part of the regularly updated statistical series *Women in the Labour Force*. It contains 1979 and 1980 data on a wide range of issues affecting women who work for pay. Among other topics, information is provided regarding the availability of daycare, maternity benefits, and levels of unionization according to sex, industry, and province.

Labour Laws and Legislation

BRENNAN, G. *Labour Standards in Canada, 1984 Edition*. Economics and Industrial Relations Research. Ottawa: Labour Canada, 1984 (134 pages; English/French; Cat. L2-7/1984E; $6.75). An updated report on the minimum employment standards established by federal, provincial, and territorial legislation. It covers matters of concern to women workers, such as hours of work and overtime pay, minimum wage, annual vacation and paid holidays, equal pay, maternity protection, and termination of employment.

WOMEN'S BUREAU, LABOUR CANADA. *Canadian Women and Job Related Laws, 1981*. Ottawa: Supply and Services Canada, 1983 (61 pages; bilingual; Cat. L24-0078/81B; free; updated version forthcoming). This publication is a comprehensive guide to federal, provincial, and territorial laws, and international instruments, concerning working women. Also included is an extensive resource list of appropriate administering authorities.

Marriage and Divorce

BOWMAN, Myrna C. *Practical Tools to Improve Interprovincial Enforcement of Maintenance Orders after Divorce*. Study Paper. Ottawa: Law Reform Commission of Canada, 1980 (50 pages; English/French; Cat. J32-7-1-1981E; free). This study paper discusses three Commission proposals to help alleviate the growing social problem of maintenance enforcement.

DULUDE, Louise. *Love, Marriage and Money ... An Analysis of Financial Relations between the Spouses*. Ottawa: Canadian Advisory Council on the Status of Women, March 1984 (90 pages; English/French; Cat. LW31-17/1984E; free). This book critically examines the socioeconomic status of women within marriage. Among the issues discussed are ownership and management of properties and assets, consequences upon divorce, division of matrimonial property, custody, support payments, income tax, and pension rights. Proposals to improve the situation for women are put forward.

———. *Outline of Matrimonial Property Laws in Canada*. Ottawa: Canadian Advisory Council on the Status of Women, August 1982 (24 pages; English/French; free). A general overview of the laws of each province and territory with regard to matrimonial property. Inequities in the legislation are highlighted.

JUSTICE CANADA, DEPARTMENT OF. *Divorce Law in Canada: Proposals for Change*. Ottawa: Supply and Services Canada, 1984 (32 pages; bilingual; Cat. J2-43/1984; free). This paper succinctly outlines and assesses divorce law in Canada, examines recent trends in divorce reform, and puts forward proposals of reform. Matrimonial property, maintenance awards, and enforcement are briefly discussed.

MCKIE, D. C.; PRENTICE, B.; and REED, P. *Divorce: Law and the Family in Canada*. Ottawa: Statistics Canada, February 1983 (249 pages; English/French; Cat. 89-502E; $12.00). This book provides a history of marriage and divorce in Canada, and explores the social and legal aspects of divorce during the 1970s. Chapter 7 looks at property division, support, and custody.

Native Women

CLATWORTHY, Stewart J. *Issues Concerning the Role of Native Women in the Winnipeg Labour Market*. Labour Market Development Task Force, Technical Study No. 5. Ottawa: Employment and Immigration Canada, 1981 (38 pages; English; Cat. MP15-4/5-1981E; free; out of print). Employment of native women is irregular and periodic, and their unemployment is of long duration. Based on findings from an existing survey of Winnipeg's native population, this research paper investigates native women's employment patterns and labour force performance. Highlights of the findings are included, along with a discussion of the issues affecting native women in the labour market, such as labour market segmentation based on sex and native ancestry, education and skill levels, family structures, and demographic factors. Although the results are highly localized, they are indicative of the problems encountered by native women in Canada. In addition, this study incorporates recommendations to improve employment policies and programs in this area.

INDIAN AND NORTHERN AFFAIRS CANADA. *The Elimination of Sex Discrimination from the Indian Act*. Ottawa, 1982 (23 pages; bilingual; Cat. R32-59/1982; free, out of print). A discussion paper that contains proposals and examines the controversial issue of removing the discriminatory provisions regarding sex and marital status from the Indian Act.

JAMIESON, Kathleen. *Native Women in Canada: A Selected Bibliography*. Working document. Ottawa: Social Sciences and Humanities Research Council of Canada, 1983 (49 pages; English; Cat. CR22-17/1983E; free). This bibliography contains a number of references to Canadian and U.S. books, articles, theses, films, and bibliographies on native women.

———. *Indian Women and the Law in Canada: Citizens Minus*. Ottawa: Canadian Advisory Council on the Status of Women, 1978 (108 pages; English/French; Cat. LW31-2/1978; $2.95). This book provides a historical perspective on the status of Indian women with respect to the Indian Act.

NATIVE WOMEN'S ASSOCIATION OF CANADA AND CANADA EMPLOYMENT AND IMMIGRATION COMMISSION. *Native Women: Labour Force Development*. Native Employment Directorate. Ottawa: Employment and Immigration Canada, July 1981 (49 pages; English). This report identifies the social and economic inequalities that exist for native women and outlines the historical development of this group's labour force participation. As well as examining the problems surrounding native women's employment, this paper critically assesses the Canadian Employment and Immigration Commission's delivery of programs and services to native women. In addition, recommendations to improve existing policy, programs, and strategies regarding the employment needs of native women are included.

PRYOR, Edward T. *Profile of Native Women: 1981 Census of Canada*. Ottawa: Statistics Canada, February 1984 (57 pages; English/French; Cat. 92-X-511E; $6.00). A largely statistical profile highlighting the socioeconomic situation of native women in comparison with non-native women in Canada, utilizing current 1981 Census data. The report contains useful information with respect to demographic composition, living arrangements, labour force activity (including data on occupational job type and industry), incomes and income of female lone-parent families, and education.

Parental Leave

PUBLIC SERVICE COMMISSION. *Family Responsibility Leave in the Federal Public Service*. Ottawa: Supply and Services Canada, 1984 (10 pages; bilingual; Cat. PSC 324W339; free). This booklet discusses various family-responsibility leaves and benefits that exist in the federal Public Service.

SYMES, Beth and SHEPPARD, Colleen. *Juggling a Family and a Job*. Ottawa: Canadian Advisory Council on the Status of Women, 1984 (29 pages; English/French; Cat. LW31-16/1984E). An easy-to-read booklet providing a general overview of parental leave and benefits in Canada, as well as a useful reference chart of maternity, paternity, and adoption leaves according to federal and provincial jurisdictions. In addition, the booklet addresses parental-leave issues and concludes with suggestions for improving the present system.

TOWNSON, Monica. *A National System of Fully-Paid Parental Leave for Canada: Policy Choices, Costs and Funding Mechanisms*. Women's Bureau. Discussion Paper Series A, No. 4: Equality in the Workplace. Ottawa: Labour Canada, 1983 (134 pages; English/French; Cat. L39-21/4-1983E; free). This research paper provides a detailed discussion of the issues and policies surrounding fully paid maternity/paternity leave. It examines experiences of other countries and studies the cost of a national system of paid maternity/paternity leave using the existing Unemployment Insurance Commission scheme.

WOMEN'S BUREAU, LABOUR CANADA. *Maternity and Child Care Leave in Canada*. Ottawa: Supply and Services Canada, 1983 (44 pages; English/French; Cat. L24-0958/83E; free; updated version forthcoming). This publication discusses maternity and child care leave and benefits in Canada and also examines Canadian legislation and collective agreements in this area. A reference chart of the terms and conditions of maternity leave by legislative jurisdiction is included.

Part-Time Employment

CANADIAN ADVISORY COUNCIL ON THE STATUS OF WOMEN. "Part-Time Work: Part-Time Rights." A brief presented to the Commission of Inquiry into Part-Time Work, Ottawa, September 1982 (36 pages; English/French; free). This brief outlines the major problems surrounding the conditions of part-time work and discusses part-time work in relation to women workers, with particular attention to the situation of federal public service part-time employees. The brief recommends legislative and regulatory changes and advocates the suspension of the Part-Time Employment Expansion Policy until the disadvantages associated with working part-time in the federal public service are adequately addressed.

WALLACE, Joan. *Part-Time Work in Canada*. Report of the Commission of Inquiry into Part-Time Work. Ottawa: Labour Canada, 1983 (218 pages; English/French; Cat. L24-0978/83E; free). An eclectic survey of attitudes towards part-time work in Canada, including views from individuals, unions, associations, private and government employers, as well as women's groups, organizations, and agencies. The report provides an overview of the facts and issues relating to part-time employment and contains information relating to the concerns of part-time women workers. Also included are recommendations affecting the position of part-time workers.

WHITE, Julie. *Women and Part-Time Work*. Ottawa: Canadian Advisory Council on the Status of Women, March 1983 (159 pages; English/French; Cat. LW31-13/1983E; $3.95). Almost three-quarters of all part-time workers are women, and over 80 per cent of these women are segregated into four occupational groups – clerical, services, sales, and health. Currently, part-time work for women is characterized by low status, low pay, and few benefits. This book provides a good analysis of the issues associated with part-time employment, focusing mainly on the position of married women over 25 years of age who have young children. Chapter 2 examines the facts surrounding the situation, while Chapter 4 investigates the inadequacies of government legislation pertaining to this area. In addition, this report contains suggestions regarding future policy and practices to improve the situation of part-time workers in Canada.

Pensions

CANADA PENSION PLAN ADVISORY COMMITTEE. *More Effective Participation of Homemakers in the Canada Pension Plan*. See section entitled "Homemakers."

CANADIAN ADVISORY COUNCIL ON THE STATUS OF WOMEN. "Women and Pensions: Women in Poverty." A brief presented to the Parliamentary Task Force on Pension Reform, Ottawa, May 1983 (20 pages; English/French; free). This brief calls attention to the needs of all Canadian women in the reform of Canada's pension system. The paper presents a concise summary of the Council's arguments and recommendations to improve the present Canadian retirement income system.

———. *Pension Reform for Women*. Ottawa: December 1981 (19 pages; English/French; free). A succinct discussion paper on the issues and problems surrounding pension reform for women.

DULUDE, Louise. *Pension Reform with Women in Mind*. Ottawa: Canadian Advisory Council on the Status of Women, March 1981 (121 pages; English/French; free). A clearly written overview of the Canadian pension system, along with an analysis of the associated problems. Focusing on the inadequacies of the present pension scheme with respect to women, this paper describes the issues of concern and presents suggestions to reform the retirement income system in order to improve the economic status of women in their retirement years.

HEALTH AND WELFARE CANADA. *Better Pensions for Canadians*. Ottawa: Supply and Services Canada, 1983 (61 pages; bilingual; Cat. CP45-28/1982; free). This report outlines the inadequacies of the present pension system and puts forward for discussion and debate a number of proposals for pension reform to be referred to the Parliamentary Task Force on Pension Reform. Attention to women's concerns is addressed throughout.

———. *Better Pensions for Canadians: Focus on Women*. Ottawa: Supply and Services Canada, 1983 (18 pages; bilingual; Cat. CP45-29-1982; free). This booklet highlights the concerns expressed in the main report regarding the adequacy and fairness of the retirement income system as it relates to women.

———. *Proceedings of the National Pensions Conference*. Ottawa: Supply and Services Canada, 1981 (130 pages; English/French; Cat. H21-84/1981E; free). This publication presents the proceedings of this conference and provides a collection of the viewpoints of various actors involved in the retirement income system – governments, the pension industry, employers, employees, unions, women's groups, and pensioners. Among the issues discussed are those concerning women and pensions.

NATIONAL COUNCIL OF WELFARE. *Better Pensions for Homemakers*. See section entitled "Homemakers."

———. *Pension Reform*. Ottawa: Supply and Services Canada, May 1984 (57 pages; English/French; Cat. H68-13/1984E; free). This report briefly describes the need for pension reform, provides an overview of three major routes to pension reform, discusses the pension proposals contained in the 1984 federal budget, and concludes by offering the Council's recommendations for long-term reform of Canada's retirement income system.

———. *A Pension Primer*. Ottawa: Supply and Services Canada, April 1984 (90 pages; English/French; Cat. H68-12/1984E; free). A companion report to *Pension Reform*, this paper acts as a layperson's guide to Canada's retirement income system, offering a description and critique covering such areas as federal and provincial income security programs for the aged, the CPP and QPP, private pension plans, RRSP's, and other income tax provisions that encourage savings for retirement. Information specifically relating to women is also incorporated.

PARLIAMENTARY TASK FORCE ON PENSION REFORM. *Report of the Parliamentary Task Force on Pension Reform*. Committees and Private Legislation Branch. Ottawa: House of Commons, 1983 (168 pages; English/French; free). A report of the Parliamentary Task Force Committee's findings and recommendations on pension reform to the Parliament of Canada. Among the recommendations included to improve the economic situation of women are extension of the Spousal Allowance Program, automatic splitting of the CPP and QPP pension credits, pensions for homemakers based on half the year's maximum pensionable earnings (half the average wage), raising of the GIS benefits, and a general phase-in of coverage for regular part-time employees.

Poverty

NATIONAL COUNCIL OF WELFARE. *1983 Poverty Statistics*. Ottawa, August 1983 (48 pages; English/French; free). A statistical summary of poverty in Canada, containing some information on women throughout the report.

———. *The Working Poor: People and Programs*. Ottawa, March 1981 (131 pages; English/French; Cat. H68-3/1981E; free). This is a comprehensive statistical portrait of Canada's working poor, describing the basic social, demographic, and labour market characteristics of this group. This paper contains information regarding women, as well as a critique of federal and provincial programs intended to help the working poor.

———. *Women and Poverty*. Ottawa, 1979 (67 pages; English/French; free). A large number of Canadians who live below the poverty line are women. This report addresses the issue of poor women in Canada by describing and analysing who they are, where they come from, and why they are poor. In addition, recommendations to improve the position of such women are included.

Single-Parent Families

MENZIES, June. *New Directions for Public Policy: A Position Paper on the One-Parent Family*. Ottawa: Canadian Advisory Council on the Status of Women, April 1976 (29 pages; English/French; free). This paper provides a critical discussion of the social and economic position of one-parent families in Canada and calls attention to the economic stress that mainly female-headed, one-parent families face. In addition, the paper urges a re-examination and suggests new directions for public policy in order to remedy the situation.

NATIONAL COUNCIL OF WELFARE. *One in a World of Two's*. Ottawa, April 1976 (41 pages; English/French; free). A report on one-parent families in Canada and the economic and social problems this group encounters in the labour market, child care services, welfare, housing, and social services. Suggestions to improve the situation are included.

STATISTICS CANADA. *Canada's Lone-Parent Families*. 1981 Census, Content Series. Ottawa: Supply and Services Canada, May 1984 (25 pages; bilingual; Cat. 99-933; $5.50). The number of lone-parent families continues to rise, with the majority being made up of separated, divorced, and never-married mothers in the younger ages with dependent children. This publication provides a brief and general overview of the main socioeconomic and demographic trends of lone-parent families between 1931 and 1981.

Technology

COMMUNICADO ASSOCIATES. *Towards the Integration of Women into the High Technology Labour Force in the National Capital Region*. Women's Bureau. Discussion Paper Series B: Changing World of Work. Ottawa: Labour Canada, 1982 (66 pages; English/French; Cat. L24-0128/82E; free). Focusing on the National Capital Region's high-technology industry, this research study provides a good examination of the opportunities that exist for women in the high-technology field and the ways to facilitate their integration into these positions.

EQUAL OPPORTUNITIES FOR WOMEN TASK FORCE. *Report from the Equal Opportunities for Women Task Force on Microtechnology and Its Impact on Women Public Servants*. Report to the Inter-Departmental Committee on Equal Opportunities for Women. Ottawa: January 1984 (60 pages; bilingual). This report contains a summary of major findings and recommendations on the impact of microtechnology on women public servants.

LABOUR CANADA TASK FORCE ON MICRO-ELECTRONICS AND EMPLOYMENT. *In the Chips: Opportunities, People, Partnership*. Women's Bureau. Ottawa: Labour Canada, 1982 (89 pages; English/French; Cat. L24-0628/82E; free). This report examines the positive and negative impacts and implications of microelectronic technology in Canada's workplace. Concerns of women are addressed, and recommendations to ensure that women are not disproportionately affected by technological change are put forward.

MENZIES, Heather. *Informatics Case Studies (Supplementary Material to "Women and the Chip")*. Task Force on Labour Market Development, Technical Study No. 23. Ottawa: Employment and Immigration Canada, July 1981 (98 pages; English; Cat. MP15-4/23-1981E; free; out of print). This study presents a good summary and analysis of research into office automation, with specific references to automation in banking and the effects on women. Among the recommendations suggested to reduce potential structural unemployment are a public education campaign to alert women about poor prospects for clerical jobs, retailoring of existing manpower training and counselling, as well as new training for women in informatics and other microelectronic technologies, supplemented with occupational bridging mechanisms and affirmative action programs.

SHAW, Susan. "Microtechnology and Employment: Issues of Concern to Women." Canadian Advisory Council on the Status of Women, Ottawa, July 1982 (25 pages; English/French; free). This brief to the Task Force on Micro-Electronics and Employment outlines the major difficulties women face – particularly those employed in the service sector – because of increased automation of the Canadian labour market. The report calls for an awareness of these problems – deskilling, quality of the work environment, unemployment, and hidden unemployment – and urges changes in programs and legislation, as well as attitudinal changes on the part of government, employers, educational institutions, and individuals, that will ensure a shifting of women away from traditional "women's work" to present and future market possibilities.

WARSKETT, George. "The Choice of Technology and Women in the Paid Work Force." In *Women and the Canadian Labour Force*, edited by Naomi Hersom and Dorothy E. Smith, pp. 133-64. Working Document. Ottawa: Social Sciences and Humanities Research Council of Canada, February 1982 (English; Cat. CR22-9/1981E; free; out of print). This research paper takes a critical look at technological change and discusses the impact such change has on employment, women, and the structure of the economy, as well as the social costs involved. The paper concludes by arguing for a closer association between the women's movement and unions to influence the direction and progress of technology in the workplace.

Unemployment

ARMSTRONG, Pat and ARMSTRONG, Hugh. "Job Creation and Unemployment for Canadian Women." In *Women and the Canadian Labour Force*, edited by Naomi Hersom and Dorothy E. Smith, pp. 209-55. Working Document. Ottawa: Social Sciences and Humanities Research Council of Canada, February 1982 (English; Cat. CR22-9/1981E; free; out of print). The number of women searching for paid employment continues to grow. Increasing numbers can only find part-time work. The female employment rate is higher than that of their male counterparts. This research paper provides a good discussion of the recent trends in the labour force, the issues, and the explanations surrounding the unemployment situation for women in Canada. It argues that structural factors are responsible for inequalities in employment opportunities and that any policies to improve the unemployment situation of women must be aimed at altering the structural barriers.

SHAW, Paul R. "Sizing Up the Burden of Unemployment in Canada. Part I: A General Labour Market Perspective." Research and Analysis Division. Research Studies Series, Research Paper No. 4, Statistics Canada, Ottawa, February 1984 (42 pages; English; available from the author). Part of a research series on unemployment, this paper provides a general overview of the issues surrounding unemployment. In addition, the study highlights the various groups experiencing unemployment and estimates probabilities of unemployment in certain demographic, geographical, and labour force categories. The paper puts forth the argument that economic hardship is most serious among a relatively small portion of unemployed workers. Included in this group are unemployed women who maintain a family with nobody else employed and with dependent children.

———. "Sizing Up the Burden of Unemployment in Canada. Part II: A Perspective on Financial Hardship." Research and Analysis Division. Research Studies Series, Research Paper No. 5, Statistics Canada, Ottawa, August 1984 (64 pages; English; available from the author). This research study examines the relationship between unemployment and economic hardship, focusing on family status. This task is accomplished with a discussion of the theoretical arguments surrounding the use of family status and with an empirical analysis of data taken from the 1982 Survey of Consumer Finances. The paper argues that family status is an important mediating variable and that the impact of unemployment on financial hardship is greatest among single-parent family heads, unattached individuals, and husbands in husband/wife families, and is far less among wives, adult children, and other relatives in husband/wife families. The study concludes with a brief section on policy implications. This paper raises important concerns regarding future policies directed at improving the economic status of all women.

STATISTICS CANADA. *Unemployment Rates for the Full-Time and Part-Time Labour Force*. Labour Force Activity Section, Research Series No. 36, Ottawa, September 1983 (42 pages; bilingual; Cat. 71-X-508E; occasional; $6.00). A statistical analysis providing recent data on rates of full-time and part-time employment and unemployment. Some information concerning women is included.

Unions and Women

AACH, Hana. *Unions and Affirmative Action*. Women's Bureau. Ottawa: Canadian Labour Congress, 1983 (173 pages; English; B-16; available from Affirmative Action Division, Employment and Immigration Canada, Ottawa, free). The labour movement's support for affirmative action remains small in comparison with its support for other women's demands. This discussion paper explores trade union policies and perspectives on equality issues in general and on affirmative action in particular. Also included are examples of union strategies to promote equality, as well as a discussion of a questionnaire on equality issues completed by delegates at the CLC's National Equality Conference in 1983.

BECKETT, Elizabeth. *Unions and Bank Workers: Will the Twain Ever Meet?*. Women's Bureau. Ottawa: Labour Canada, 1984 (61 pages; English/French; Cat. L24-1148/84E; free). Banks are the single largest and the least unionized employers of women. This research paper provides a historical overview and analysis of the barriers that exist to impede the growth of unionization in the industry.

LOWE, Graham S. "Problems and Issues in the Unionization of Female Workers: Some Reflections on the Case of Canadian Bank Employees." In *Women and the Labour Force*, edited by Naomi Hersom and Dorothy E. Smith, pp. 307-42. Working Document. Ottawa: Social Sciences and Humanities Research Council of Canada, February 1982 (English; Cat. CR22-9/1981E; free; out of print). This research paper examines the principal causes and problems of female unionization. An analysis of the theoretical issues surrounding female unionization, as well as a description of the recent movements of Canadian female bank employees to unionize, is included.

WHITE, Julie. *Women and Unions*. Ottawa: Canadian Advisory Council on the Status of Women, 1980 (131 pages; English/French; Cat. LW31-6/1980E). This book provides a discussion of the trade union movement in Canada and the place of women within it. Part I of the book reviews the development of trade unions in Canada between 1881 and 1921 and argues that the historically low unionization of women is the result of relatively fewer women in the paid workforce, sex segregation of their work, and women's lack of economic leverage. The second half of the study looks at the structure of the trade union movement, outlines the process of unionizing, and presents three cases of women's trade union involvement.

Notes

CHAPTER 2

1 This is *not* to imply that daycare is a problem for mothers. The need for child care arises when *parents* work. In this chapter, however, I concentrate on working mothers because the Canadian economic reality is that women are the primary care givers in most families, and it is working women who give rise to the need for extra-family child care.

2 See Michael Krashinsky, *Day Care and Public Policy in Ontario* (Toronto: University Press, 1977), p. 8. Many of the data referred to as being from my earlier book were obtained at that point from other sources. These sources are not referenced in this chapter but are available in the 1977 book.

3 Statistics Canada, "Family Characteristics and Labour Force Activity," Labour Force Research Paper 29, Ottawa, 1982, pp. 26-29.

4 Krashinsky, *Day Care and Public Policy in Ontario*, p. 11.

5 National Day Care Information Centre, "Day Care Spaces in Canada, 1982," report obtained from Howard Clifford, Consultant on Day Care, Health and Welfare Canada, Ottawa, 1982.

6 Krashinsky, *Day Care and Public Policy in Ontario*, p. 13.

7 National Day Care Information Centre, "Provincial Funding of Day Care Services," report obtained from Howard Clifford, Consultant on Day Care, Health and Welfare Canada, Ottawa, 1982.

8 National Day Care Information Centre, "Provincial Funding of Day Care Services."

9 In fact, there are even more extensive proposals that would provide free universal daycare 24 hours a day.

10 Krashinsky, *Day Care and Public Policy in Ontario*, pp. 35-45.

11 Krashinsky, *Day Care and Public Policy in Ontario*.

12 Economists say that the recipient is better off because the choice to reduce consumption is voluntary. Since the cash grant costs the same as the subsidy, the consumer can afford to buy the same mix of goods as before. Since the consumer voluntarily chooses to buy a different mix, we conclude that he does so because the new mix makes him better off (using the doctrine of "revealed preference").

13 Suppose that care in a daycare centre costs D and through informal arrangements A. Then the parent will choose the informal arrangement as long as daycare is not worth $D - A$ more. A full subsidy by the government to daycare will cost the government D, and the benefit to the recipient will be A plus the extra value of the daycare centre. Since this extra value is less than $D - A$, the benefit to the recipient will be less than D, and both parties will be better off by opting for an income transfer to the mother that is somewhat less than D. If the daycare centre is equally preferred to the informal arrangement, then the transfer need only be greater than A to make both the government and the recipient better off.

14 Krashinsky, *Day Care and Public Policy in Ontario*, p. 29.

15 What economists mean by "inefficiency" is that there exists an alternative that can make some parties better off and no one worse off. Incidentally, the argument in the text still holds even when the mother's potential taxes are included. If the daycare cost is D, the mother's earnings are E, and the potential taxes paid are T, then free daycare will cost the government $D - T$ and generate benefits to the mother of $E - T$. As long as D exceeds E, both parties could be made better off by transferring an amount less than $D - T$ and more than $E - T$ to the mother and allowing her to remain at home.

16 Krashinsky, *Day Care and Public Policy in Ontario*, pp. 48-52.

17 These numbers come from rough calculations using the 1983 tax forms. Only income taxes are computed, while other payroll taxes are ignored.

18 M. Krashinsky, *User Charges in the Social Services: An Economic Theory of Need and Inability* (Toronto: University Press, 1981), p. 80.

19 Krashinsky, *Day Care and Public Policy in Ontario*, pp. 94-96.

20 National Day Care Information Centre, "Provincial Funding of Day Care Services."

CHAPTER 3

1 Statistics Canada shows median earnings of full-time women workers aged 25-34 as \$16,484, equivalent to \$317 a week. Maternity benefits at 60 per cent would be \$190 a week. No benefits are payable for the first two weeks of leave, and 60 per cent benefits would be paid for the next 15 weeks. The loss would be (2 x \$317) + 15 (\$317 − \$190) = \$2,539. See Statistics Canada, *Income Distributions by Size in Canada, 1982*, Cat. 13-207, Table 72.

2 See Beth Symes and Colleen Sheppard, *Juggling a Family and a Job*, Canadian Advisory Council on the Status of Women (Ottawa: Supply and Services Canada, 1984).

3 Sheila B. Kammerman and Alfred J. Kahn, *Child Care, Family Benefits, and Working Parents: A Study in Comparative Policy* (New York: Columbia University Press, 1981).

4 See Statistics Canada, *The Labour Force*, Cat. 71-001, April 1984, Table 12A.

5 For a fuller discussion of these options, see Monica Townson, *A National System of Fully-Paid Parental Leave for Canada: Policy Choices, Costs and Funding Mechanisms*, Women's Bureau, Discussion Paper Series A, No. 4: Equality in the Workplace (Ottawa: Labour Canada, 1983).

6 Townson, *A National System of Fully-Paid Parental Leave for Canada*.

7 Employment and Immigration Canada, *Unemployment Insurance in the 1980s* (Ottawa: Supply and Services Canada, 1981).

8 Employment and Immigration Canada, *Unemployment Insurance in the 1980s*.

9 More recent calculations may be found in Monica Townson, "Paid Parental Leave Policies: International Comparisons, with Options for Canada," a study prepared for the Task Force on Child Care (forthcoming).

10 Symes and Sheppard, *Juggling a Family and a Job*.

11 Employment and Immigration Canada, *Unemployment Insurance in the 1980s*.

12 Department of Finance, *Analysis of Federal Tax Expenditures for Individuals* (Ottawa: Supply and Services Canada, 1981).

CHAPTER 4

1 National Research Council, Committee on Occupational Classification and Analysis, *Women, Work and Wages: Equal Pay for Jobs of Equal Value*, ed. D. J. Treiman and H. I. Hartmann (Washington, D.C.: National Academy Press, 1981), p. 33.

2 The results discussed in the first section of this chapter are taken from Jac-André Boulet and Laval Lavallée, *The Changing Economic Status of Women* (Ottawa: Supply and Services Canada, 1984).

3 For the sake of simplicity, we use the terms "male occupations" and "female occupations." It must be stressed that these terms have a strictly numerical connotation, as defined.

4 Diane Werneke, *Microelectronics and Office Jobs: The Impact of the Chip on Women's Employment* (Geneva: International Labour Office, 1983), p. 30.

5 These figures are taken from Dan Ciuriak and Harvey Sims, *Participation Rate and Labour Force Growth in Canada* (Ottawa: Finance Canada, April 1980), as well as special Statistics Canada tabulations.

6 Boulet and Lavallée, *The Changing Economic Status of Women*.

7 Employment and Immigration Canada, "CEIC Training Programs and Participation of Women," Report 1, Study Group on Women in Training, Ottawa, October 1983.

8 Employment and Immigration Canada, "CEIC Training Programs and Participation of Women."

9 Employment and Immigration Canada, "Female Trainees Started – Assessment of 1982-1983 Performance," Report, Study Group on Women in Training, Ottawa, November 1983.

10 For further information on this study, see Daniel Boothby, "Women Re-Entering the Labour Force and Training Programs: Evidence from Canada," a study prepared for the Economic Council of Canada (forthcoming).

11 Boothby, "Women Re-Entering the Labour Force and Training Programs."

12 John Kettle and Marc Zwelling, "Policy Reflections on Skills Development Leave," Information Document 26, prepared for the Skill Development Leave Task Force, Ottawa, April 1983.

13 Employment and Immigration Canada, *Learning a Living in Canada*, Report to the Minister of Employment and Immigration Canada by the Skill Development Leave Task Force (Ottawa: Supply and Services Canada, 1983). The work of the Commission d'étude sur la formation des adultes should also be mentioned; see *Apprendre – Une action volontaire et responsable* (Quebec: Ministère des Communications, 1982).

14 See, on this topic, Science Council of Canada, *Science for Every Student: Educating Canadians for Tomorrow's World*, Report 36 (Ottawa: Supply and Services Canada, 1984).

15 Jane Adams, "First Things First: Equity for Women Through Paid Skill Development Leave," Information Document 8, prepared for the Skill Development Leave Task Force, Ottawa, April 1983.

16 Boulet and Lavallée, *The Changing Economic Status of Women*.

17 Employment and Immigration Canada, "Female Trainees Started."

18 Boothby, "Women Re-Entering the Labour Force and Training Programs: Evidence from Canada."

19 For further information on U.S. experiments in this area, see Marthe Sansregret, *The Recognition of Women's Experiential Learning in the United States* (Quebec: John Abbott College and the Direction générale de l'éducation des adultes, ministère de l'Éducation, 1983).

20 Marilyn Mohan and Gerald Swartz, "Part-Time Work and Skill Development Leave," Information Document 32, prepared for the Skill Development Leave Task Force, Ottawa, April 1983.

21 M. D. Ornstein, *Accounting for Gender Differentials in Job Income in Canada: Results from a 1981 Survey*, Women's Bureau, Discussion Paper Series A, No. 2: Equality in the Workplace (Ottawa: Labour Canada, 1982).

22 L. K. Charles, "Women Managers: The Process of Career Decision Making," thesis, Simon Fraser University, Vancouver, April 1984.

23 Ornstein, *Accounting for Gender Differentials*.

24 M. S. Devereaux and Edith Rechnitzer, *Higher Education: Hired?* Statistics Canada (Ottawa: Supply and Services Canada, 1980).

25 Ornstein, *Accounting for Gender Differentials*.

26 Lois Banfill Shaw (ed.), *Unplanned Careers: The Working Lives of Middle-Aged Women* (Toronto: Lexington Books, D. C. Heath and Company, 1983).

27 W. E. Block and M. A. Walker, *Discrimination, Affirmative Action, and Equal Opportunity* (Vancouver: The Fraser Institute, 1982).

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CHAPTER 5

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CHAPTER 6

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2 See Armstrong and Armstrong, *A Working Majority*, Table 5. The trend towards increased entrance of females into traditionally male-dominated occupations is also supported by a recent Economic Council of Canada report that shows that during the 1970s the number of women working in occupations where men represented more than half the workforce rose by 85 per cent. See Economic Council of Canada, *On the Mend*, Twentieth Annual Review (Ottawa: Supply and Services Canada, 1983).

3 See, for example, Robb, "Earnings Differentials between Males and Females in Ontario, 1971"; Gunderson and Reid, *Sex Discrimination in the Canadian Labour Force Market*; and Ontario Ministry of Labour, "Equal Pay for Work of Equal Value," Discussion Paper, Toronto, October 1976. For an excellent summary of the various studies, see Gunderson, *The Male-Female Earnings Gap in Ontario*.

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5 See, for example, Norman D. Willis and Associates, "State of Washington, Comparable Worth Study, 1974," and "State of Washington, Comparable Worth Study, Phase II, 1976." For an excellent discussion of these and other U.S. studies, see Morley Gunderson, "Equal Pay and Equal Opportunities in the Labour Market," Report to the MacDonald Commission on the Economic Union, Ottawa, June 1984.

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8 The proportion of the 0.20 gap that can be eliminated by equal-pay-for-work-of-equal-value legislation is discussed in the section entitled "Equal Pay for Work of Equal Value: An Overview."

9 In 1983, an Act to amend Part IX of the Employment Standards Act was introduced in Ontario. If passed, the Act would prevent employers from paying different wages for men and women where the work requires substantially equivalent or greater skill, effort, and responsibility under similar working conditions when

these factors are considered as a whole and not individually.

10 In the case of Quebec, the key phrase is "un travail équivalent" – that is, equivalent work. The Charter does not clarify the meaning of this term, however, and unlike the federal legislation, where work of equal value is defined right in the Act, its interpretation is a matter for the courts.

11 See Canadian Human Rights Commission, *The Canadian Human Rights Act: Employer Guide* (Ottawa: Supply and Services Canada, 1981), p. 27.

12 CHRC, *The Canadian Human Rights Act*, pp. 29-30.

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15 Hearings in another case involving a group of office clerks employed by Atomic Energy of Canada in Glace Bay, Nova Scotia, are pending. For a good summary of the cases settled to date, see Canadian Human Rights Commission, *Equal Pay for Work of Equal Value*, news releases and excerpts from the Commission's summary of decisions reporting equal-pay-for-work-of-equal-value cases (Ottawa: CHRC, May 1982).

16 CHRC, *Equal Pay for Work of Equal Value*, pp. 13-15.

17 There are, of course, effects in the labour market when any given differential is *correctly* diagnosed as discriminatory. These effects, however, are discussed in the next section.

18 Discrimination in the education sector, for example, might limit women's opportunities in the labour market. Also, of course, there are a number of models of employment discrimination that could give rise to segregation of a minority group into a few occupations. These will be discussed in the next section.

19 See, for example, Adam Smith, *Wealth of Nations* (New York: Modern Library, 1937).

20 Consider, for example, the case of a university that produces an educational product. To do this, the university hires professors in different disciplines to do jobs that are essentially identical – i.e., to teach and do research. However, if we compare the wages in, say, history and classics, on the one hand, with the wages paid in engineering or business, on the other, it is generally the case that the earnings are substantially different (*ceteris paribus*) because of the differing supply conditions. Differentials between jobs of equal value for the same sex have been found in the Public Service as well and are thought to be the result of differing bargaining unit strength as well as supply and demand factors. See John G. Campbell, "Equal Pay for Work of Equal Value," a paper presented to the Canadian Industrial Relations Association, Guelph University, May 1984, p. 5. Note, moreover, that the existence of wage differentials among males in jobs of equal value also raises an administrative problem for the enforcement of the legislation. If in resolving a complaint about the value of some female occupation there are two male occupations of the same value but with different wages, to which of these should the wages of the female job be adjusted? This point is discussed later.

21 See, for example, Barbara Bergmann, "Occupational Segregation, Wages, and Profits When Employers Discriminate by Race or Sex," *Eastern Economic Journal* (April/July 1974):103-10; and Bergmann, "The Effect on White Incomes of Discrimination in Employment," *Journal of Political Economy* 79 (March/April 1971):249-313.

22 See, for example, P. Doeringer and M. Piore, *Internal Labour Markets and Manpower Analysis* (Lexington, Mass.: D. C. Heath, 1971); and R. Edwards, M. Reich, and D. Gordon (eds.), *Labour Market Segmentation* (Lexington, Mass.: D. C. Heath, 1975).

23 Jobs in the primary market are hypothesized to have several of the following characteristics: high wages, good working conditions, employment stability, chance of advancement, equity, and due process in the administration of work rules. Jobs in the secondary sector are hypothesized to have low wages and fringe benefits, poor working conditions, high labour turnover, little chance for advancement, and often arbitrary and capricious supervision.

24 Thurow, for example, would argue that internal markets are a necessary incentive for effective skill transmission between workers. Doeringer and Piore, on the other hand, would argue that internal markets provide incentives that minimize turnover, hence providing conditions conducive to the provision of firm-specific training. See Lester Thurow, *Generating Inequality: Mechanisms of Distribution in the U.S. Economy* (New York: Basic Books Incorporated, 1975); and P. Doeringer and M. Piore, *Internal Labour Markets and Manpower Analysis*.

25 This is particularly true if we take into account that apart from there being "ports of entry," there are also "ports of exit" where workers might be able to move to other firms where their present value is higher.

26 Models are based on the work of G. Becker, *The Economics of Discrimination* (Chicago: University of Chicago Press, 1971); Bergmann, "Occupational Segregation, Wages, and Profits When Employers Discriminate by Race or Sex"; K. Arrow, *Some Models of Racial Discrimination in the Labour Market* (Santa Monica, California: Rand Corporation, 1971); E. Phelps, "The Statistical Theory of Racism and Sexism," *American Economic Review* 62 (September 1972):659-61; Thurow, *Generating Inequality*; Doeringer and Piore, *Internal Labour Markets and Manpower Analysis*; and Solomon William Polachek, "Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure," *Review of Economics and Statistics* 63, no. 1 (February 1981).

It should be noted that none of the models appear satisfactory as a complete explanation of discriminatory behaviour. The models of Becker, Bergmann, Arrow, and Phelps, for example, fail to explain the stubborn persistence of wage differentials in competitive markets (discriminators should be "driven out" by the profit-maximizing nondiscriminators). Polacheks's occupational-choice model, moreover, seems to have only mixed empirical support for its hypotheses in that while his own empirical work seems to support his hypotheses, later empirical work by England and Beller do not. See Paula England, "The Failure of Human Capital Theory to Explain Occupational Sex Segregation," *Journal of Human Resources* 17, no. 3 (1982); and Andrea Beller, "Occupational Segregation by Sex: Determinants and Changes," *Journal of Human Resources* 17, no. 3 (1982):371-92. It should be remembered, therefore, that while each of the models do, perhaps, give some insight into the way that discriminatory behaviour manifests itself in the labour market, in the absence of conclusive empirical evidence, these arguments remain, simply, nonmutually exclusive hypotheses about the causes of occupational segregation by sex.

27 Suppose, for example, that customers don't like dealing with female lawyers and are only willing to do so at a reduced price. In such a case, although the productive characteristics and, presumably, the real marginal product of male and female lawyers are the same, the price that customers will pay for the output of the female lawyer is lower, and hence the value of her marginal product is lower.

28 There seems to be some evidence in Canada to support the contention that the wage differentials do differ by occupation. Although the data are unadjusted for productive characteristics, we note, for example, that in 1979 female office managers (a male occupation) earned only 84.2 per cent of the male average weekly wage, whereas in the occupation "junior secretary," a female occupation, females earned 99.1 per cent of the male average weekly wage rate. See Labour Canada, Women's Bureau, *Women in the Labour Force, Facts and Figures, 1978-1979 Edition, Part II: Earnings of Men and Women* (Ottawa: Supply and Services Canada, 1981), Table 13. The Economic Council of Canada, in its publication entitled *On the Mend*, also shows that, in 1980, in the 20 highest-paying occupations in Canada (primarily male-intensive) women earned 65 per cent of male annual earnings (adjusted for hours worked), whereas in the 20 lowest-paying occupations (primarily female-intensive) females earned 75 per cent of male annual earnings. Finally, in some econometric analysis by Gunderson (on U.S. data), it is suggested that there is a statistically significant relation between the ratio of female to male earnings and the income (status) of the occupation, although it does not appear to be large. See Morley Gunderson, "The Influence of the Status and Sex Composition of Occupations on the Male-Female Earnings Gap," *Industrial and Labour Relations Review* 31, no. 2 (January 1978).

29 Roberta Robb, "Occupational Segregation and Equal Pay for Work of Equal Value," *Industrial Relations* 39, no. 1 (1984).

30 In effect, the overcrowding of females into the female occupation depresses the wage and drives out the males who have a higher opportunity cost in male occupations.

31 In order to avoid prosecution under the equal-pay-for-work-of-equal-value legislation, this might result in a kind of spin-off segregation in the female occupation whereby employers change job descriptions and job titles slightly. For example, females might be called typists and males (i.e., male typists) might be called executive assistants.

32 That this type of preference may exist in Canada is suggested by the following: in response to a 1974 Gallup Poll question put to Canadians, 41.5 per cent indicated that they preferred a male boss.

33 See, for example, Jacob Mincer and Haim Ofek, "Interrupted Work Careers: Depreciation and Restoration of Human Capital," *Journal of Human Resources* 17, no. 1 (Winter 1982).

34 Polachek's empirical work seems to lend some support to his hypotheses. Using eight broad occupational categories (U.S. data), he finds that more home time (i.e., larger periods of time spent out of the labour force) increases the probability of being in all except the managerial occupations. Moreover, the size of the coefficients indicates that those with the greatest home time are least likely to enter managerial and professional occupations that, as Polachek shows, have the highest atrophy rate. More recent work by England, "The Failure of Human Capital Theory to Explain Occupational Sex Segregation," and Beller, "Occupational Segregation by Sex," however, does not seem to support Polachek's hypothesis. We hasten to note, moreover, that this analysis, while illuminating, is not in any way designed to suggest that the observed occupational segregation of the labour force by sex is due solely, or even substantially, to women's decisions about the type of work that they are willing or able to do, given their domestic constraints. It is simply designed to show that even in the complete absence of any discriminatory segregation arising from the demand side, some occupational segregation might still be observed as long as traditional views of women's role vis-à-vis the household and family persist or to the extent that occupational choice is influenced by variables such as the atrophy rate. For an interesting discussion of these latter points, see Nancy S. Barrett, "Obstacles to Economic Parity for Women," *American Economic Review* 72 (1982): 160-65.

35 Robb, "Occupational Segregation and Equal Pay for Work of Equal Value."

36 This is similar to the prediction of what happens when some firms are covered by minimum wage laws or unions and some are not. To the extent that unemployed workers queue for the higher-paid jobs in the covered sector, however, this effect will be lessened.

37 See, for example, Finis Welch, *Minimum Wages: Issues and Evidence* (Washington, D.C.: American Enterprise Institute, 1978).

38 In fact, the trade union movement in Canada has recognized the principle of equal pay for work of equal value. As early as March 1976, the Conference for Women Trade Unionists, sponsored by the Canadian Labour Congress, developed a policy statement entitled a "Declaration of the Equality of Opportunity

and Treatment of Women Workers." This document was subsequently unanimously accepted at the 11th Biennial Convention of the Canadian Labour Congress held in May 1976. Sections 2 and 3 of that Declaration indicate unequivocal support for equal pay for work of equal value.

39 Gunderson, "Equal Pay and Equal Opportunities in the Labour Market."

40 Campbell, "Equal Pay for Work of Equal Value."

CHAPTER 7

1 Statistics Canada, *Employee Compensation in Canada – All Industries*, Cat. 72-619P, 1978.

2 Thorne Stevenson & Kellogg, *Employee Benefit Costs in Canada* (Toronto: 1982).

3 Statistics Canada, *Employee Compensation in Canada*, p. 6; and Thorne Stevenson & Kellogg, *Employee Benefit Costs in Canada*, p. 1.

4 Statistics Canada, *Employee Compensation in Canada*, Table 3, p. 12.

5 Compare Statistics Canada, *Employee Compensation in Canada*, Table 8, p. 16, with Thorne Stevenson & Kellogg, *Employee Benefit Costs in Canada*, Table 1, p. 1.

6 Statistics Canada, *Employee Compensation in Canada*, Table 6, p. 15.

7 Thorne Stevenson & Kellogg, *Employee Benefit Costs in Canada*, p. 10.

8 Comparison of data from Statistics Canada, *Corporations and Labour Unions Returns Act, Report for 1980, Part II*, Cat. 71-202, 1984, and *Labour Force Annual Averages, 1975-1983*, Cat. 71-529, occasional.

9 Secretary of State, *Convention on the Elimination of All Forms of Discrimination against Women: Report of Canada* (Ottawa: Secretary of State, 1983), pp. 155-59; Michael D. Ornstein, *Accounting for Gender Differentials in Job Income in Canada: Results from a 1981 Survey* (Ottawa: Labour Canada, 1983), p. 1; and Morley Gunderson and Frank Reid, *Sex Discrimination in the Canadian Labour Market: Theories, Data and Evidence* (Ottawa: Labour Canada, 1981), pp. 33-35.

10 Gunderson and Reid, *Sex Discrimination in the Canadian Labour Market*, p. 49.

11 Public Service Staff Relations Board, Pay Research Bureau, *Employee Benefits and Working Conditions, Canada, 1982* (Ottawa: 1983), pp. 116-19.

12 Labour Canada, Women's Bureau, *Women in the Labour Force, Part I: Participation* (Ottawa: Supply and Services Canada, 1983), Table 17, p. 49.

13 Commission of Inquiry into Part-Time Work in Canada, *Part-Time Work in Canada* (Ottawa: Labour Canada, 1983), p. 167. Also, see Julie White, *Women and Part-Time Work* (Ottawa: Canadian Advisory Council on the Status of Women, 1983), pp. 101-105.

14 Health and Welfare Canada, *Survey of Old Age Security and Canada Pension Plan Retirement Benefit Recipients, July 1981 – Final Report* (Ottawa: 1983), p. 9.

15 Louise Dulude, *Pension Reform with Women in Mind* (Ottawa: Canadian Advisory Council on the Status of Women, 1981), pp. 56-59.

16 "Canadian Human Rights Benefit Regulations," adopted pursuant to Section 18 of the Canadian Human Rights Act, *Canada Gazette*, Part II, vol. 114, no. 2, January 23, 1980, pp. 279-88; and Pension Commission of Manitoba, "Information Circular on Amendments to the Manitoba Pension Benefits Act, 1983," Winnipeg, 1983.

17 Draft legislation tabled on June 5, 1984, Section 3(5), p. 13.

18 Treasurer of Ontario and Minister of Economics, "Ontario Proposals for Pension Reform," Toronto, 1984, p. 49.

19 *Canada Pension Plan Act, Revised Statutes of Canada*, 1970, Chapter C-5, as amended.

20 Canada Pension Plan Advisory Committee, *More Effective Participation of Homemakers in the Canada Pension Plan: Majority and Minority Reports to the Minister of National Health and Welfare* (Ottawa: Health and Welfare Canada, 1983).

21 CPP Advisory Committee, *More Effective Participation of Homemakers*, p. 9.

22 CPP Advisory Committee, *More Effective Participation of Homemakers*, pp. 36-37; Parliamentary Task Force on Pension Reform, *Pension Reform* (Ottawa: Supply and Services Canada, 1983), pp. 24-30; and National Action Committee on the Status of Women, *Pension Reform: What Women Want* (Toronto: 1983).

23 Statistics Canada, *Pension Plans in Canada, 1982*, Cat. 74-401, Table C, p. 13.

24 Statistics Canada, *Pension Plans in Canada, 1982*, pp. 12 and 14.

25 Statistics Canada, *Pension Plans in Canada, 1982*, p. 14.

26 Statistics Canada, *Pension Plans in Canada, 1982*, p. 13.

27 D. C. McKie, B. Prentice, and P. Reed, *Divorce: Law and the Family in Canada*, Statistics Canada (Ottawa: Supply and Services Canada, 1983), p. 13.

28 Kevin Collins, *Women and Pensions* (Ottawa: Canadian Council on Social Development, 1978), p. 199.

29 Gunderson and Reid, *Sex Discrimination in the Canadian Labour Market*, p. 53.

30 Dulude, *Pension Reform with Women in Mind*; and National Action Committee on the Status of Women, *Pension Reform*.

31 Federal Minister of Finance, *Action Plan for Pension Reform*, Budget Speech (Ottawa: 1984); and Treasurer of Ontario and Minister of Economics, "Ontario Proposals for Pension Reform."

32 Task Force on Retirement Income Policy, *The Retirement Income System in Canada: Problems and Alternative Policies for Reform*, vol. 1, 1979, p. 43.

33 Statistics Canada, *Labour Force Annual Averages, 1975-1983*, Cat. 71-529, occasional, pp. 369-77.

34 *Bliss v. Attorney General of Canada* (1979) 1 S.C.R. 185 (1978) 6 W.W.R. 711.

35 Commission of Inquiry into Part-Time Work, *Part-Time Work in Canada*, p. 171.

36 White, *Women and Part-Time Work*, p. 122.

CHAPTER 8

1 In an examination of the labour market for men and women and their respective earnings, Victor R. Fuchs concluded that they are deemed not to be perfectly substitutable. See "Recent Trends and Long-Run Prospects for Female Earnings," *American Economic Review* (May 1974):236-42.

2 Statistics Canada, *Census of Canada, 1981*, Cat. 92-920, Volume 1.

3 Examined in considerable detail in a paper by David Brody and David H. Buchanan, "Information Technology and the Experience of Work," presented at an EEC Conference on Information Society – Information Technology: Impact on the Way of Life, Dublin, Ireland, November 18-20, 1981.

4 Refers to the confluence of computers, computer-related instruments, and telecommunications technology. The term "télématique" was coined by Simon Nora and Alain Minc in *The Computerization of Society* (Cambridge, Mass.: MIT Press, 1980).

5 On the significance of information for labour market efficiency, see George Stigler, "Information in Labour Markets," *Journal of Political Economy* (September 1962), supplement.

6 Chantal de Gournay, "Leisure and Cultural Activities in the Information Society," paper presented at an EEC Conference on Information Society – Information Technology: Impact on the Way of Life, Dublin, Ireland, November 18-20, 1981.

7 Alvin Toffler has examined this trend in *The Third Wave* (New York: Bantam Books, 1981), p. 194.

8 The main arguments for and against these and other possibilities are examined by Tarja Cronberg in "A Wordprocessor in Her Living Room? On the Impact of Information Technology on the Way of Life and Work of Women," a paper presented at an EEC Conference on Information Society – Information Technology: Impact on the Way of Life, Dublin, Ireland, November 18-20, 1981.

9 Dudley Dillard, *Economic Development of the North Atlantic Community* (Inglewood Cliffs, N.J.: Prentice-Hall, 1967), pp. 246-47; and Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (London: Allen & Unwin, 1943), p. 83.

10 See Task Force on Employment Opportunities in the '80's, *Work for Tomorrow: Employment Opportunities for the '80's* (Ottawa: House of Commons, 1981), particularly Chapters 3-5.

11 John Hicks, *Capital and Growth* (London: Oxford University Press, 1969), p. 270.

12 For the magnitude of changes in the industry structure of the Canadian economy, see Economic Council of Canada, *The Bottom Line: Technology, Trade, and Income Growth* (Ottawa: Supply and Services Canada, 1983), pp. 115-18.

13 All references to employment statistics are based on information contained in the Economic Council of Canada, *People and Jobs: A Study of the Canadian Labour Market* (Ottawa: Supply and Services Canada, 1976); and Statistics Canada, *The Labour Force*, Cat. 71-001, March 1983.

14 Colin Norman, *Microelectronics at Work: Productivity and Jobs in the World Economy* (Washington, D.C.: Worldwatch Institute, 1980), Paper 39, p. 29.

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16 Some of the explanations for this are examined by Steven Globerman in *The Adoption of Computer Technology by Insurance Companies*, Economic Council of Canada (Ottawa: Supply and Services Canada, 1984).

17 Fritz Machlup, *The Production and Distribution of Knowledge in the United States* (Princeton: Princeton University Press, 1962).

18 Bernard Ruffieux, "New Technology and Women's Employment: Notes on a Debate," *Social Change and Technology in Europe*, Bulletin No. 5 (Brussels: Commission of the European Communities, 1982).

19 I. Barron and R. C. Curnow, *The Future with Microelectronics: Forecasting the Effects of Information Technology* (London: Frances Pinter, 1979), pp. 189-90.

20 Cited in Ruffieux, *New Technology and Women's Employment, p. 9.*

21 Norman Bentwell, *Economic Aspects of Immigration* (New York: National Committee on Immigration, 1947), p. 27.

22 Paul A. Samuelson and Anthony Scott, *Economics*, 3rd Cdn. edition (Toronto: McGraw-Hill, 1971).

23 For the Swiss Watch Industry case and the National Cash Register Co. case, see European Trade Union Institute, *The Impact of Microelectronics on Employment in Europe in the 1980's* (Brussels: 1970); for the Telex Machine case, see Barron and Curnow, *The Future with Microelectronics*; for the Electronic Calculators case, see B. Lamborghini, "The Diffusion of Microelectronics in Industrial Companies," The Olivetti Company, Torino, Italy, 1980, mimeo.

24 S. G. Peitchinis, "The Employment Implications of Computers and Telecommunications Technology," Department of Communications, Ottawa, 1981.

25 All information on education from Statistics Canada, *A Statistical Portrait of Canadian Higher Education: From the 1960's to the 1980's* (Ottawa: 1983), Tables 1 and 18, pp. 26 and 48.

26 Daniel Bell, *The Coming of Post-Industrial Society* (New York: Basic Books, 1973).

27 All information on occupations from Statistics Canada, *Census of Canada, 1981.*

28 This is the thesis of a very sensible paper by Arndt Sorge, Gert Hartman, Malcolm Warner, and Ian Nicholas on "Microelectronics in the Workplace, Unity and Diversity of Work under CNC in Great Britain and West Germany," presented at an EEC Conference on Information Society – Information Technology: Impact on The Way of Life, Dublin, Ireland, November 18-20, 1981.

29 Task Force on Employment Opportunities in the '80s, *Work for Tomorrow*.

30 Lorna Marsden and Lorne Tepperman, "The Migrant Wife: The Worst of All Worlds," *Journal of Business Ethics*, forthcoming.

31 Roslyn L. Feldberg and Evelyn Nakano Glenn, "Technology and Work Degradation: Effects of Office Automation on Women Clerical Workers," in *Machina ex Dea: Feminist Perspectives on Technology*, ed. Joan Rothschild (New York: Pergamon Press, 1983).

32 Joan Rothschild, ed., *Machina ex Dea: Feminist Perspectives on Technology* (New York: Pergamon Press, 1983).

33 Barbara Tunis, "Medical Licensing in Lower Canada: The Dispute over Canada's First Medical Degree," in *Medicine in Canadian Society: Historical Perspectives*, ed. S.E.D. Shortt (Montreal: McGill-Queen's University, 1981).

34 Lorna Marsden, "The 'Labour Force' Is an Ideological Structure: A Guiding Note to the Labour Economists," *Atlantis* 7, no. 1 (fall 1981).

35 Albert Breton, *Marriage, Population, and Labour Force Participation*, Economic Council of Canada (Ottawa: Supply and Services Canada, 1984).

36 In a recent report, Judge Abella stressed the process through which discriminatory outcomes occur over time. She pointed out that women, visible minorities, native peoples, and the disabled amount to 60 per cent of the Canadian population, and she also pointed out that the economic and social systems are primarily designed "for white able-bodied males; . . . and practices based on stereotypical characteristics ascribed to an individual because of characteristics ascribed to the group" usually results in practices based on white able-bodied males' perceptions of everyone else. See Rosalie Abella, *Equality in Employment*, A Royal Commission Report, Volume 1 (Ottawa: Supply and Services Canada, October 1984).

37 National Action Committee on the Status of Women, "Memo," Ottawa, August 1984, p. 3.

38 The following studies are recommended for further reading on the subjects discussed in this paper: Ursula Huws, "New Technology and Women's Employment: Case Studies from West Yorkshire," Leeds Trade Union and Community Resource Centre, Equal Opportunities Commission, Manchester, 1982; Internationaler Bund Freier Gewerkschaften, *Neue Technologie Und Beschaftigung Der Frauen* (Brussels: 1983); Wassily Leontief, Faye Duchin, *et al.*, "The Impact of Automation on Employment, 1963-2000: Final Report," Institute for Economic Analysis, N.Y.U., April 1984, mimeo.; Heather Menzies, *Women and the Chip* (Montreal: Institute for Research and Public Policy, 1981); Organisation for Economic Co-operation and Development, *Labour Supply, Growth Constraints and Work Sharing* (Paris: OECD, 1982); and Barney Olmsted, "Changing Times: The Use of Reduced Work Time Options in the United States," *International Labour Review* no. 4 (1983).

39 R. W. Rumberger and Henry M. Levin, "Forecasting the Impact of New Technologies on the Future Job Market," Project Report No. 84-A4, Institute for Research on Educational Finance and Governance, Stanford University, February 1984, mimeo.

CHAPTER 9

1 It has been suggested that "the . . . important and underlying reason for the invisibility of unpaid work performed at home lies in the model of the patriarchal families, which until recently was the major operative model for social policy purposes in Canada." Margrit Eichler, "The Connection between Paid and Unpaid Labour and Its Implications for Creating Equality for Women in Employment," a paper prepared for the Commission of Inquiry on Equality in Employment, March 1984.

2 Statistics Canada, *Marriages and Divorces, Vital Statistics, Volume II*, Cat. 84-205, 1982; and Economic Council of Canada, *On the Mend*, Twentieth Annual Review (Ottawa: Supply and Services Canada, 1983), p. 90.

3 Louise Dulude, *Love, Marriage and Money . . . An Analysis of Financial Relations between the Spouses* (Ottawa: Canadian Advisory Council on the Status of Women, 1984), p. 28; and Economic Council of Canada, *On the Mend*.

4 The Commission of Inquiry into Part-Time Work recommended to the federal government that the Canada Labour Code, Part III (Labour Standards), be amended to ensure that part-time workers receive the same protection, rights, and benefits (on a prorated basis) as those now guaranteed to full-time workers. Seventy-two per cent of all part-time workers in 1981 were women. Labour Canada, *Part-Time Work in Canada. Report of the Commission of Inquiry into Part-Time Work* (Ottawa: Supply and Services Canada, 1983), p. 145.

5 The 1979 United Nations Convention on the Elimination of All Forms of Discrimination Against Women, which has been ratified by Canada, provides in Article 11(1) that: "States Parties shall take all appropriate measures to eliminate discrimination against women in the field of employment in order to ensure, on a basis of equality of men and women, the same rights, in particular: (a) The right to work as an inalienable right of all human beings."

In 1975, the International Labour Organization adopted the Resolution Concerning a Plan of Action with a View to Promoting Equality of Opportunity and Treatment for Women Workers, which provides that: "Any action aimed at establishing equality of opportunity and treatment of women workers must be determined on the basis of the fundamental principle that all human beings (men and women) have the undeniable right to work."

6 National Day Care Information Centre, *Status of Day Care in Canada, 1977: A Review of the Major Findings of the National Day Care Study, 1977* (Ottawa: 1977), p. 1.

7 Statistics Canada, *Initial Results from the 1981 Survey of Child Care Arrangements*, Labour Force Survey Research Paper 31 (Ottawa: October 1982).

8 Jay Belsky and Lawrence O. Steinberg, "The Effects of Day Care: A Critical Review," *Child Development* 49, no. 4 (1978); Laura C. Johnson and Janice Dineen, *The Kin Trade* (Toronto: McGraw-Hill Ryerson, 1981); and Michael Rudder, *Maternal Deprivation Reassessed* (London: Penguin, 1972).

9 Hilary Land, "Social Policies and the Family: Their Effect on Women's Paid Employment in Great Britain," in *Equal Employment Policy for Women: Strategies for Implementation in the United States, Canada and Western Europe*, ed. Ronnie Steinberg Ratner (Philadephia: Temple University Press, 1980), p. 382.

10 Alison Prentice, *The School Promoters: Education and Social Class in Mid-Nineteenth Century* (Toronto: McClelland and Stewart Limited, 1977).

11 Reva Landau, "Parental Leave: A Comparative Study," in *Women in the Workforce: Affirmative Action and Parental Benefits. Sourcebook* (Ottawa: National Association of Women and the Law, 1983), pp. 84 and 93.

12 Landau, "Parental Leave," pp. 85-86.

13 Landau, "Parental Leave," pp. 82-89.

14 United States Department of Labor, Women's Bureau, *Community Solutions for Child Care: Report of a Conference* (Washington, D.C.: Department of Labor, Women's Bureau, August 1979), p. 58.

15 United States Department of Labor, Women's Bureau, *Community Solutions for Child Care*, p. 9.

16 The most extensive treatment of child care appears in the International Labour Organization's 1981 Recommendation Concerning Equal Opportunities and Equal Treatment for Men and Women Workers: Workers with Family Responsibilities. Article 6 of that document contains the following general provision: "With a view to creating effective equality of opportunity and treatment of men and women workers, each Member should make it an aim of national policy to enable persons with family responsibilities who are engaged or wish to engage in employment to exercise their rights to do so without being subject to discrimination and, to the extent possible, without conflict between their employment and family responsibilities."

In particular, ILO members are to take measures to develop or promote child care services [Article 9(c)], to promote information and education to create broader public understanding of the problems of workers with family responsibilities [Article 10], and to undertake or promote research on "the various aspects of the employment of workers with family responsibilities" [Article 11(a)].

Section V, which focuses on child care and family services and facilities, says members should, in cooperation with public and private organizations, take measures to collect and publish adequate statistics on child care needs and preferences [Article 24] and take steps to meet these needs and preferences [Article 25]. They should also "encourage and facilitate the establishment, particularly in local communities, of plans for the systematic development of child care and family services and facilities" [Article 25(a)] and "themselves organize or encourage and facilitate the provision of adequate and appropriate child-care and family services and facilities, free of charge or at a reasonable charge in accordance with the workers' ability to pay, developed along flexible lines and meeting the needs of children of different ages, of other dependants requiring care and of workers with family responsibilities" [Article 25(b)]. Article 26(1) provides that: "Child-care and family services and facilities of all types should comply with standards laid down and supervised by the competent authorities." Article 26(3) states that "the competent authorities should provide or help to ensure the provision of adequate training at various levels for the personnel needed to staff child-care and family services and facilities." Finally, Article 33 provides that measures should be taken "to develop home-help and home-care services which are adequately regulated and supervised and which can provide workers with family responsibilities, as necesssary, with qualified assistance at a reasonable charge in accordance with their ability to pay." While not binding on ILO members, recommendations are part of the International Labour Code and, as such, have some moral force. In addition, ILO members must report to that organization on their implementation of recommendations.

17 Article 11(2), subsection (c). The United Nations Declaration on the Elimination of Discrimination Against Women (1967) contains a similar provision [Article 10(2)].

18 According to *Census of Canada, 1981*, children under 16 made up 24.3 per cent of the total population.

19 Ontario Manpower Commission, "The Employment of Women in Ontario: Background Paper," Toronto, October 1983, p. 17.

20 National Council of Welfare, *Women and Poverty* (Ottawa: 1979), p. 21.

21 Ontario Manpower Commission, "The Employment of Women in Ontario," p. 17; see also Employment and Immigration Canada, *Labour Market Development in the 1980s*, Report of the Task Force on Labour Market Development (Ottawa: July 1981), p. 95.

22 Statistics Canada, *Initial Results from the 1981 Survey of Child Care Arrangements*, p. 43.

23 Ontario Manpower Commission, "The Employment of Women in Ontario," p. 17; see also Stephen Chadima *et al.*, *Children and Pre-School: Options for Federal Support* (Washington, D.C.: Congressional Budget Office, Congress of the United States, September 1978), pp. 43-51.

24 Saskatchewan Department of Labour, Women's Research Unit, "A Study of Part-Time Employment in Saskatchewan," September 1979, p. 35; Julie White, *Women and Part-Time Work* (Ottawa: Canadian Advisory Council on the Status of Women, March 1983), pp. 3-10, 29 and 30.

25 United States, Commission on Civil Rights, *Child Care and Equal Opportunity for Women*, Clearinghouse Publication No. 67 (Washington, D.C.: June 1981), pp. 10-11.

26 United States, Commission on Civil Rights, *Child Care and Equal Opportunity for Women*, p. 10.

27 Paul Phillips and Erin Phillips, *Women and Work: Inequality in the Labour Market* (Toronto: James Lorimer, 1983), p. 52.

28 Statistics Canada, *Income Distributions by Size in Canada, 1982*, Cat. 13-207, 1984. Fifty-five per cent represents a comparison of male and female full-time and part-time workers; 64 per cent represents a comparison of only full-time, full-year male and female workers.

29 Statistics Canada, *Income Distributions by Size in Canada, 1982*.

30 Statistics Canada, Consumer Income and Expenditure Division, *Earnings of Men and Women: Selected Years, 1967 to 1979*, Cat. 13-577, occasional, 1981, p. 11; and Phillips and Phillips, *Women and Work*, p. 52.

31 Thomas J. Bergmann and Frederick S. Hills, "Internal Labor Markets and Indirect Pay Discrimination," *Compensation Review* 14, no. 4 (1982):41; Ruth G. Blumrosen, "Wage Discrimination, Job Segregation, and Title VII of the Civil Rights Act of 1964," *University of Michigan Journal of Law Reform* 12, no. 3 (Spring 1979):399; Gail C. A. Cook and Mary Eberts, "Policies Affecting Work," in Gail C. A. Cook (ed.), *Opportunity for Choice: A Goal for Women in Canada* (Ottawa: Statistics Canada and C. D. Howe Research Institute, 1976), pp. 174-75; Marcia Greenberger, "The Effectiveness of Federal Laws Prohibiting Sex Discrimination in Employment in the United States," in *Equal Employment Policy for Women*, ed. Ronnie Steinberg Ratner (Philadelphia: Temple University Press, 1980), p. 118; Lindsay Niemann, *Wage Discrimination and Women Workers: The Move Towards Equal Pay for Work of Equal Value in Canada*, Women's Bureau, Discussion Paper Series A, No. 5: Equality in the Workplace (Ottawa: Labour Canada, 1984), pp. 42-54.

32 Sylvia Ostry, *The Occupational Composition of the Canadian Labour Force*, 1961 Census Monograph (Ottawa: Dominion Bureau of Statistics, 1967), pp. 6-8, 27-28, and 50-53.

33 Monica Boyd, "Occupational Segregation: A Review," in *Sexual Equality in the Workplace: Proceedings of a Conference* (Ottawa: Labour Canada, Women's Bureau, March 1982), pp. 66-92; see also Diane Werneke, "The Economic Slowdown and Women's Employment Opportunities," *International Labour Review* 177, no. 1 (January-February 1978):37-51.

34 Statistics Canada, *Income Distributions by Size in Canada, 1982*.

35 Nancy S. Barrett, "The Impact of Public Policy Programs on the Status of Women: Obstacles to Economic Parity for Women," *American Economic Review* 72, no. 2 (May 1982):160-65; Blumrosen, "Wage Discrimination," p. 155; and Donald J. Treiman and Heidi Hartmann (eds.), *Women, Work and Wages: Equal Pay for Jobs of Equal Value*, a report by the Committee on Occupational Classification and Analysis, Academy of Behavioral and Social Sciences, National Research Council (Washington, D.C.: National Academy Press, 1981), p. 93.

36 Karen S. Koziara, David A. Pierson, and Russell E. Johannesson, *The Comparable Worth Issue: Current Statistics and New Directions, Proceedings of the 1983 Spring Meeting* (Madison, Wisconsin: Industrial Relations Research Association, 1983), p. 505.

37 Evan J. Spelfogel, "Equal Pay for Work of Comparable Value: A New Concept," *Labour Law Journal* 32, no. 1 (January 1981):31; and Treiman and Hartmann, *Women, Work and Wages*, pp. 56-62.

38 Albert Breton, *Marriage, Population, and the Labour Force Participation of Women*, Economic Council of Canada (Ottawa: Supply and Services Canada, 1984).

39 "Paying Women What They're Worth," *QQ – Report from the Center for Philosophy and Public Policy* 3, no. 2 (Spring 1983):3-4.

40 Morley Gunderson, "Labour Market Aspects of Inequality in Employment and Their Application to Crown Corporations," a paper prepared for the Commission of Inquiry on Equality in Employment, October 1983, pp. 6.10-6.18.

41 Robert Belton, "Discrimination and Affirmative Action: An Analysis of Competing Theories of Equality and Weber, "*North Carolina Law Review* 59 (1981):537, footnote 28. Belton argues that "reverse discrimination" is a legal fiction.

42 Conference Board of Canada. *Quarterly Canadian Forecast* 10, no. 3 (October 1983).

43 Diane Bellemare, Ginette Dussault, and Lise Poulin-Simon, "Les femmes et l'économie," a paper prepared for the Commission of Inquiry on Equality in Employment, February 1984.

CHAPTER 10

1 There are two major variants: equal pay for equal work and equal pay for work of equal value.

2 The debate between Brian Mulroney, John Turner, and Ed Broadbent on Women's Issues, August 15, 1984. See *The Globe and Mail* and *The Vancouver Sun*, August 16, 1984. This is also the subject of bipartisan agreement in the United States, as the "comparable work" bill H.R. 5680 passed by a vote of 413 to 6 (on June 20, 1984).

3 See National Academy of Sciences, *Women, Work, and Wages* (Washington, D.C.: 1981). In this system, the "value" of jobs is determined by arbitrarily assigning points, or scores, to the standard elements of jobs such as skill, effort, responsibility, and working conditions.

4 Without wage differentials to lead workers around "as if by an invisible hand" (said Adam Smith), the only remaining market signal will be the varying unemployment rates in several industries. (Workers will shift from high-unemployment sectors to low-unemployment ones.) However, labour mobility will still be reduced, with only one effect, not two, working on its behalf. As well, there is a tendency for our present unemployment insurance program to enhance unemployment and to decrease labour mobility. See Herbert C. Grubel and Michael A. Walker (eds.), *Unemployment Insurance* (Vancouver: The Fraser Institute, 1978). It is thus difficult to see how the Canadian labour force can be successfully induced to organize itself in accordance with the ever-changing desires of Canadian consumers under a regime of relatively fixed wages.

5 It is clear that equal-pay enactments are but yet another version of wage controls. Yet the experience of centuries of wage controls has shown that they misallocate labour, harm the best interests of most employees, and reduce economic efficiency. See Michael Walker (ed.), *The Illusion of Wage and Price Controls* (Vancouver: The Fraser Institute, 1976).

6 Morley Gunderson, "Male-Female Wage Differences in Ontario," a report prepared for the Ontario Ministry of Labour, December 1973, p. 103. Similarly, in the Republic of South Africa, the white-racist unions advocate equal pay for equal work as a *better means* than job reservation laws of protecting their jobs against the competition of lower-paid black workers. See Leon Louw, "Free Enterprise and the South African Black," address to Barclay's Executive Women's Club, Johannesburg, South Africa, July 31, 1980, p. 4. This is a paradox. In South Africa, equal pay for equal work is advocated as a means of protecting a favoured group (white unionists), while in Canada it is urged as a way of helping an unfavoured group (females).

7 This data is for 1982 and applies to full-time employees. See Statistics Canada, *Earnings of Men and Women, 1981 and 1982*, Cat. 31-577, 1984.

8 Profit incentives, unfortunately, do not apply to the public sector. Bureaucrats who discriminate against women will thus run costlier operations, but they need not fear losing out to competitors and eventual bankruptcy. As a result, it would be plausible to expect a far greater rate of discrimination in government service than in the marketplace. Unfortunately, it is very difficult to make an empirical test of this proposition. This is because discrimination against women means paying them less than their marginal productivity, while paying men an amount equal to productivity or at least a wage rate closer to their productivity levels. The difficulty is that in the public sector there can be no independent measure of productivity. In the private marketplace, a wage rate indicates, at least in the *ex ante* sense, that the employer directly, and the consumer indirectly, values the contribution of the worker (productivity) more highly than the amount paid. In government service, in contrast, we are not even entitled to assume that marginal productivity always takes on a positive value. This is why in GNP accounts government services are valued at cost; there are no independent measures of consumer valuation or productivity. A second problem is that it is by no means clear that only discrimination against *women* will take place in the public sector, nor even that discrimination against women will predominate over discrimination against men. Given the popularity of the idea of "reverse discrimination" among civil servants, it would be a heroic assumption to take for granted the direction of any discrimination that occurs.

Because the profit and loss system discourages discrimination in the marketplace but not in the public sector, The Fraser Institute recommended that "government efforts . . . ought to be directed primarily towards ensuring that discrimination does not occur in the public sector." See Walter Block and Michael Walker (eds.), "Preface," *Discrimination, Affirmative Action and Equal Opportunity* (Vancouver: The Fraser Institute, 1982), p. xvi. This recommendation has been challenged on the ground that female/male earnings ratios were actually higher in the public sector than in the private sector. See Margaret A. Denton and Alfred A. Hunter, *Equality in the Workplace, Economic Sectors and Gender Discrimination in Canada: A Critique and Test of Block and Walker . . . and Some New Evidence*, Women's Bureau, Discussion Paper Series A, No. 6: Equality in the Workplace (Ottawa: Labour Canada, 1982), pp. 12 and 34-40. But as we have seen, this finding is not incompatible with greater discriminatory behaviour in the public sector – in this case against men and in favour of women. We know there will be more discrimination in the public sector than in the private sector. But we don't know whether it will be against women or men, or both. Thus, the only empirical implication of this hypothesis is a greater *variance* in wage rates (other things held constant), not a higher or lower female/male earnings ratio. But this test has yet to be made.

9 Just as nature abhors a vacuum, economics abhors an unexploited profit opportunity. And the existence of "exploited" labour – that is, employees paid a wage below their productivity levels – is just such a profit opportunity. If men and women have equal productivity, say, $10 per hour, and men are paid $10 while women are paid $6.40, then the sex-neutral firm could hire all the women it wanted at, say, $7.00 and severely undercut its competition. But if there were competition between such sex-neutral employers, women's wages would tend to be bid up to the $10 level. To illustrate just how powerfully business abhors a profit opportunity, consider the international mobility of multinational corporations. A large part of the motivation for the locational decisions of transnational enterprises is to "take advantage" of low-paid labour. They do so, of course, by moving in, opening a plant, and bidding wages *up*, towards productivity levels.

10 Even Jane Fonda, whose radical feminist credentials need take a back seat to no one else's, has run afoul of the equal-pay movement. Jane Fonda's Workout is currently being sued for $3 million by three former female instructors on grounds of discrimination in pay compared with male employees who do essentially the

same work. Ms. Fonda's lawyer replies that the men were paid more because they were more productive in running clients through the exercise machines. See *The Vancouver Sun*, March 31, 1983, p. D8.

11 Thomas Sowell, *Civil Rights: Rhetoric or Reality?* (New York: William Morrow and Company, 1984), p. 97.

12 Barbara B. Reagan, "Two Supply Curves for Economists? Mobility and Career Attachment of Women," *American Economic Review* 65, no. 2 (1975): 102.

13 Martin Meissner, "Sexual Division of Labour and Inequality: Labour and Leisure," in Marylee Stephenson (ed.), *Women in Canada* (Don Mills: General Publishing, 1977), pp. 166-74.

14 Sylvia Ostry, "Labour Force Participation and Childbearing Status," *Demography and Educational Planning* (Toronto: Ontario Institute for Studies in Education, 1970), pp. 143-56.

15 Alan E. Bayer, "Marriage Plans and Educational Aspirations," *American Journal of Sociology* 75 (1969):239-44.

16 Single female academics who received their Ph.D.'s in the 1930s outperformed their male counterparts by becoming full professors in the 1950s to a slightly *greater* extent, even though all women in academia fell far behind their male colleagues on a variety of indices. See Helen S. Astin, "Career Profiles of Women," in Alice S. Rossi and Ann Calderwood (eds.), *Academic Women on the Move* (New York: Russell Sage Foundation, 1973), p. 153 (cited in Thomas Sowell, "*Weber* and *Bakke*, and the Presuppositions of 'Affirmative Action'," in Block and Walker (eds.), *Discrimination*).

17 According to Sowell, as of 1971, never-married females aged 30-39 earned *more* than never-married males of that age, even though all women as a group earned less than half of all men as a group. Could this be due to anti-male employer discrimination? See Thomas Sowell, *Affirmative Action Reconsidered* (Washington, D.C.: American Enterprise Institute, 1975), p. 28.

18 In the view of Denton and Hunter, in *Equality in the Workplace*, pp. 23-34, this effect of marriage on incomes cannot be substantiated empirically. However, their analysis is marred by a number of flaws.

First, they explicitly eschew our "narrow focus" on comparing never-married men and women; instead, they opt for a study of "all women in paid labour" (p. 24). But this leads to a poor test of our hypothesis. In our view, the best way to determine if there is any anti-female market discrimination is by considering only those who have never been touched by the institution of marriage: the never-married. A methodology that includes the ever-married (married, separated, divorced, widowed) cannot fully rule out the possibility of the asymmetric effects of marriage on male and female incomes. A better approach would have been to consider only the never-married category and to incorporate such independent variables of theirs as age, education, unionization, work interruptions, part-time and part-year work, and so on.

Second, they interpret discrimination as a residual; that is, they allot whatever earnings gap that cannot be explained by their other variables to discrimination. It is no more sensible to ascribe the pay differential between men and women to discrimination than it is to claim that the equally great or even greater income disparity between married and unmarried men is due to this source. Moreover, what of the possibility that this residual is due to *other kinds of discrimination*, apart from employer discrimination, such as discrimination against women on the part of consumers, fellow employees? Even if it made sense to interpret this residual as discrimination, it by no means logically follows that *employer* discrimination is necessarily responsible. (For further commentary on this procedure, see footnote 25 below and related text discussion.)

Third, even their own findings, improperly designed as they are, offer limited support to the marital-status hypothesis. Their Table 3 (p. 33) indicates that the "married" and "separated" categories are statistically significant at the .001 level. But why distinguish between "married," "separated," "divorced," and "widowed?" A proper test of the marital-status hypothesis would make no such distinction; rather it would combine all these categories together into "ever-married" status.

Fourth, and even more problematical, the authors' other independent variables serve as rough proxies for marital status (i.e., women with greater career interruptions are more likely to be married). Utilizing these, and then adding marital status, they find that these latter marriage categories add little or no explanatory power to the regression equations. But surely this is fallacious. For it was never contended that marital status makes a significant contribution to female/male income ratios *over and above* a whole host of variables that are correlated with marital status. This method of proceeding is almost guaranteed to invite problems of multicollinearity.

19 See Walter Block, "Economic Intervention," in Block and Walker (eds.), *Discrimination*, pp. 107-12. Alexander objects to this finding on the ground that the never-married "single women are . . . older than single men" and that age is related to productivity. See Judith A. Alexander, "Equal-Pay-for-Equal-Work Legislation in Canada," Economic Council of Canada, Discussion Paper 252, Ottawa, 1984, p. 27. But it is by no means clear that age is always *positively* related to productivity. On the contrary, it peaks in the mid-years; age is positively correlated with productivity before, negatively afterwards. In any case, the age difference in the sample was only 2.5 years, hardly enough to call into question an increase in the female/male income ratio of .374 for the total sample to .992 for the never-married. In this regard, perhaps her remark on p. 30 becomes more comprehensible: "It is impossible to refute Block's arguments, although I do not find them convincing." (Also, as reported in the original research, never-married females have 1.6 years more schooling than never-married males, work 3.3 more weeks in a year, and work on a part-time basis to a lesser degree,

by 1.2 per cent. However, since "living together" or "cohabitation" might be expected to have similar effects on male and female incomes as does marriage, and this phenomenon is *not* captured by official statistics on marital status, the ratio .992 may be an underestimation. Conceivably, the two biases might cancel each other out.)

20 So important is occupational segregation as an explanation of the female/male wage gap that it all but disappears when "productivity adjusted comparisons are made within the same narrowly defined occupations within the same establishment – the wage gap that is most relevant for equal-pay legislation." When this is done, the female/male adjusted earnings ratio "tends to be in the range of .90-.95." See Morley Gunderson, *The Female-Male Earnings Gap in Ontario: A Summary*, Employment Information Series, No. 22 (Toronto: Ontario Ministry of Labour, February 1982), p. 17. Also, on the basis of occupational segregation, Walter Williams rejects the discrimination hypothesis as an explanation for the fact that black/white female income ratios (1.0225 in 1970) are much higher than black/white male income ratios (.6925 in 1970). See Walter Williams, "On Discrimination and Affirmative Action," in Block and Walker (eds.), *Discrimination*.

21 Sowell, in *Civil Rights*, p. 94, notes that "women have historically specialized in fields (such as editor, teacher, librarian) that they could leave and re-enter some years later, without large losses from obsolescence (as would occur as a tax attorney, aeronautical engineer, medical researcher)."

22 John M. McDowell, "Obsolescence of Knowledge and Career Publication Profiles: Some Evidence of Differences among Fields in Costs of Interrupted Careers," *American Economic Review* 72, no. 4 (September 1982):761.

23 Many feminist writers have claimed such phenomena do exist. See Meredith M. Kimball, "Women and Success: A Basic Conflict?" in Marylee Stephenson (ed.), *Women in Canada* (Don Mills, Ont.: General Publishing, 1977), p. 85. For a more recent example of such commentary, see Judith Finlayson, "Anyway You Want Me," *The Globe and Mail*, October 12, 1984, p. 11.

24 C. Hoffman and J. Reed, "Imbalance Not Discrimination," in Block and Walker (eds.), *Discrimination*.

25 Michael Levin, "Comparable Worth: The Feminist Road to Socialism," *Commentary* 78, no. 3 (September 1984):15.

26 See, for example, Morley Gunderson, "Decomposition of the Male/Female Earnings Differential: Canada, 1970," *The Canadian Journal of Economics* 12, no. 3 (August 1979):479-85. See also Roberta Edgecombe Robb, "Earnings Differentials between Males and Females in Ontario, 1971," *The Canadian Journal of Economics* 11, no. 2 (1978). For a reply to the latter, see Walter Block and Walter Williams, "Male-Female Earnings Differentials: A Critical Reappraisal," *The Journal of Labor Research* 2, no. 2 (Fall 1981).

27 Sowell, in *Civil Rights*, pp. 46-47, says that: "One of the most important causes of differences in income and employment is the way people work – some diligently, carefully, persistently, cooperatively, and without requiring much supervision or warnings about absenteeism, tardiness, or drinking, and others requiring much concern over such matters. Not only are such things inherently difficult to quantify; any suggestion that such differences even exist is sure to bring forth a storm of condemnation. In short, the civil rights vision has been hermetically sealed off from any such evidence. Both historical and contemporary observations on intergroup differences in work habits, discipline, reliability, sobriety, cleanliness, or cooperative attitude – anywhere in the world – are automatically dismissed as evidence only of the bias or bigotry of the observers. 'Stereotypes' is the magic word that makes thinking about such things unnecessary. Yet despite this closed circle or reasoning that surrounds the civil rights vision, there is . . . evidence that cannot be disposed of in that way."

28 All attempts to discern objective values – whether for employment, goods, services, whatever – have failed, and have failed miserably. For critiques of the medieval theory of "just price," and the Marxian attempt to establish "socially useful labour" as the objective measure of the value of goods and services, see Eugen von Bohm-Bawerk, "Value and Price," *Capital and Interest*, Book 3, Volume 2 (South Holland, Ill.: Libertarian Press, 1959).

29 We also assume, for the sake of argument, a necessarily segmented labour force; males cannot be hired to guard female prisoners, and females cannot be hired to guard male prisoners.

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71 Gary S. Becker, *The Economics of Discrimination* (Chicago: University of Chicago Press, 1957).

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73 Kenneth Arrow, "The Theory of Discrimination" in O. Ashenfelter and A. Rees, *Discrimination in Labor Markets* (Princeton, N.J.: Princeton University Press, 1973), pp. 3-33; and Edmund S. Phelps, "The Statistical Theory of Racism and Sexism," *American Economic Review* (September 1972):659-61.

74 Bergmann, "Occupational Segregation," pp. 103-10.

75 For a discussion of the relation between these two theories, see the articles by Michael J. Piore and Eileen Appelbaum, in Michael J. Piore (ed.), *Unemployment and Inflation: Institutionalist and Structuralist Views* (White Plains, N.Y.: M. E. Sharpe, Inc., 1979). The term "dual labour markets" is undoubtedly too simplistic to describe the complexity of labour markets. However, it does describe a situation of systematic inequality that is less well expressed by a term such as "segmented markets."

76 In 1982, 36 per cent of families headed by a woman had an income that was lower than the low-income cutoff points established by Statistics Canada (1969 base) compared with only 6.9 per cent of families headed by a man. Even more significant, this figure represented an increase relative to a rate of poverty of 33 per cent in 1981 and 36 per cent in 1979. The rate for families with a male head increased slightly in 1982, but it was still lower than the 1979 rate. See Statistics Canada, *Income Distributions by Size in Canada*, Cat. 13-207, various years.

77 Statistics Canada, *Income Distributions by Size in Canada*. Single-parent families represented 6.6 per cent of families in 1971 and 10.1 per cent in 1982 and were headed by women in 85 per cent of the cases in both years. In 1971, the average income of single-parent families with a female head was $5,314 compared with $6,817 in 1977 (constant 1971 dollars) and $6,531 in 1982. In the case of single-parent families with a male head, real income also decreased after 1977: $9,176 in 1971, $11,098 in 1977, and $10,506 in 1982. The average income of two-parent families with a male head increased slightly between 1977 and 1982.

78 Average weekly remuneration for the industrial composite decreased in real terms between 1977 and 1980, and in spite of a slight increase between 1980 and 1984, it was still lower in May 1984 than in May 1977; see Statistics Canada, *Employment, Earnings and Hours*, Cat. 72-002, various years. On the other hand, between 1977 and 1982, average earnings in constant dollars of women who worked mainly full-time, 49 to 52 weeks per year, increased by less than half a percentage point. For men, they decreased by 2.6 per cent. See Statistics Canada, *Earnings of Men and Women, Selected Years, 1967 to 1979*, Cat. 13-577, various years; and Statistics Canada, *Income Distributions by Size in Canada*.

79 Statistics Canada, *The Labour Force*, Cat. 71-001, various years. As a measure of the hidden unemployed, I added: (1) the number of additional persons who would be in the labour market if the participation rate (distinguishing between men and women) were the same everywhere in Canada as it is in Alberta; and (2) the number of people who work part-time and who declare that they would prefer to work full-time, multiplied by 0.5. In other words, I counted this last group as being half unemployed.

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84 See Graham S. Lowe, *Bank Unionization in Canada: A Preliminary Analysis*, Centre for Industrial Relations (Toronto: University of Toronto, July 1980).

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87 See, for example, Louise Dulude, *Pension Reform with Women in Mind* (Ottawa: Canadian Advisory Council on the Status of Women, March 1981); National Council of Welfare, *Better Pensions for Homemakers* (Ottawa: Supply and Services Canada, 1984); Comité consultatif sur le Régime de pensions du Canada, *Les femmes au foyer et le Régime de pensions du Canada* (Ottawa: Health and Welfare Canada, March 1983); and Canadian Advisory Council on the Status of Women, "Women and Pensions: Women in Poverty," a brief presented to the Parliamentary Task Force on Pension Reform, Ottawa, May 1983.

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89 See, for example, the following Canadian Advisory Council on the Status of Women publications: *Women and Legal Action: Precedents, Resources and Strategies for the Future*, October 1984; *Women and the Constitution*, 1981; Pat Armstrong and Hugh Armstrong, *A Working Majority: What Women Must Do for Pay*, February 1983; *Reproductive Hazards at Work*, December 1982; Julie White, *Women and Part-time Work*, March 1983; *Play from Strength*, March 1983; *Prostitution in Canada*, March 1984; *Fair Ball: Towards Sex Equality in Canadian Sport*, September 1982; *Better Day Care for Canadians: Options for Parents and Children*, August 1982; Julie White, *Current Issues for Women in the Federal Public Service*, June 1983; Dianne Kinnon, *Report on Sexual Assault in Canada*, December 1981; Louise Dulude, *Pension Reform with Women in Mind*, March 1981; Louise Dulude, *Outline of Matrimonial Property Laws in Canada*, August 1982; Louise Dulude, *Love, Marriage and Money . . . An Analysis of Financial Relations between the Spouses*, March 1984; Anita Heller, "Women as Health Guardians in the Home" (forthcoming); Maureen Baker,

"Adolescent's Orientation Towards the Future" (forthcoming); and *Juggling a Family and a Job*, 1984.

90 Canadian Advisory Council on the Status of Women, *Prostitution in Canada*.

91 Canadian Advisory Council on the Status of Women, *Prostitution in Canada*, pp. 8, 10, and 20.

92 Canadian Advisory Council on the Status of Women, *Prostitution in Canada*, pp. 2, 8, and 14-16.

93 Section 195.1 of the Criminal Code states that: "Every person who solicits any person in a public place for the purpose of prostitution is guilty of an offence punishable on summary conviction" (R.S.C. 1970, c. C-34, s.195.1).

94 For arguments in favour of freedom of speech and against censorship, see for example: June Callwood, "Censorship Won't Stop Pornography: Callwood," *The Gazette*, November 21, 1984; Callwood, "What Price Censorship?" in *Branching Out* 6, no. 4 (1979); Mary Ambrose, "ACTRA's Porn Plebiscite," *Horizons* (October 1984); and Bryan Johnson, "So Where Is All That Porn?" in *The Globe and Mail*, April 28, 1984, p. 10. For feminist arguments in favour of restraining the publication and distribution of pornographic material see, for example, Susan Cole, "Combatting the Practice of Pornography," *Broadside* 5, no. 10 (August/September 1984):6-7; Michele Landsberg, "Censorship's a Must in Any Sane Society," *Toronto Star*, April 9, 1983; Montreal Council of Women, *Pornography: A Human Rights Issue Which Concerns Both Men and Women* (Montreal: September 1984); Toronto Area Caucus of Women and the Law, *Pornography: The Law and Women's Rights* (Toronto: January 1984); and Jullian Ridington, *Discussion Paper on Pornography* (Toronto: National Action Committee on the Status of Women, March 1983). For insight into both sides of the debate, from a feminist perspective, see, for example, David Copp and Susan Wendell, *Pornography and Censorship* (Buffalo: Prometheus Books, 1983); Andrea Dworkin, "For Men, Freedom of Speech: For Women, Silence Please" in Laura Lederer (ed.), *Take Back the Night* (New York: William Morrow and Co. Inc., 1980); and Women against Pornography, "Porn, Feminism and the Censorship Dilemma: A Discussion Paper," Victoria, 1981, unpublished paper.

95 Carl E. Beigie and Ellen G. Shapiro, "Pornography: An Economic Overview," a submission to The Special Committee on Pornography and Prostitution, February 7, 1984.

96 As evidenced in the following developments, for example: changes to the unemployment insurance legislation, effective January 1, 1984, which eliminate some of the shortcomings of UI maternity benefits and improve the situation for adoptive parents (*An Act to Amend the Unemployment Insurance Act*, 1971, no. 3, c. 150 in *The Canada Gazette*, Part 3, June 29, 1983); an amendment to the Canadian Human Rights Act in 1983 to specify that discrimination on the basis of pregnancy or childbirth is prohibited as discrimination on the basis of sex (*An Act to Amend the Canadian Human Rights Act and to Amend Certain Other Acts in Consequence Thereof*, c. 143, in *The Canada Gazette*, Part 3, April 27, 1983); amendments to the Canada Labour Code as tabled in May 1984 proposing to extend child care leave among other things (*An Act to Amend the Canada Labour Code and the Financial Administration Act*, Bill C-34, House of Commons, May 15, 1984); breakthroughs in collective bargaining – for example, in 1981 CUPW won the right to 20 weeks of 93 per cent paid maternity leave; the establishment in May 1984 of a Task Force on Child Care by the federal government, focusing on cost-sharing arrangements; and the announcement by the new government, in the Throne Speech of November 1984, of a Parliamentary Task Force on Child Care that will make recommendations on the federal government's role in establishing a system of child care in Canada.

97 Monica Townson, *A National System of Fully-Paid Parental Leave for Canada. Policy Choices: Costs and Funding Mechanisms*, Women's Bureau (Ottawa: Labour Canada, 1983); and Albert Breton, *Marriage, Population, and Labour Force Participation*, Economic Council of Canada (Ottawa: Supply and Services Canada, 1984).

98 Dulude, *Love, Marriage and Money*.

99 Statistics Canada, *Vital Statistics, Vol. II* (Ottawa: 1981), Table 1, p. 2.

100 See, for example, Department of Justice Canada, *Final Report*, Federal-Provincial Committee on Enforcement of Maintenance and Custody Orders in Canada (Ottawa: June 1983); Andy Wachtel, *What Works: An Exploratory Examination of Court Enforcement Efforts and Payment Levels of Maintenance Orders Monitored by the Vancouver Family Court* (Vancouver: Social Planning and Research Council, United Way of the Lower Mainland, January 1983); Law Reform Commission of Saskatchewan, *Tentative Proposals for an Enforcement of Maintenance Orders Act* (Saskatoon: March 1982); The Canadian Institute for Research, *Matrimonial Support Failures: Reasons, Profiles and Perceptions of Individuals Involved* (Edmonton: The Institute of Law Research and Reform, March 1981); and Manitoba Law Reform Commission, *Report on the One Year Rule for Enforcement of Arrears in Maintenance* (Winnipeg: January 1980).

101 See, for example, Dulude, *Love, Marriage and Money*, pp. 39-40; Julien Payne, "Approaches to Economic Consequence of Marriage Breakdown," in Rosalie Abella and Claire L'Heureux-Dubé (eds.), *Family Law: Dimensions of Justice* (Toronto: Butterworths, 1983), p. 31; and Bertha Wilson, "The Variations of Support Orders," in Abella and L'Heureux-Dubé (eds.), *Family Law*, p. 42.

102 Baker, "Adolescent's Orientation Towards the Future."

103 Danièle St. Laurent, "Projet Adolescentes : Rapport Synthèse," Conseil du statut de la femme, Montreal (forthcoming).

104 Organisation for Economic Co-operation and Development, *Education and Work: The Views of the Young*, Centre for Educational Research and Innovation (Paris: OECD, 1983).

105 The unemployment rate for adolescents in September 1984 was 19.3 for females and 22.4 for males; see Statistics Canada, *The Labour Force*, Cat. 71-001, September 1984, p. 18, Table 1.

106 Heller, "Women as Health Guardians in the Home."

107 Theodan Litman, "The Family as a Basic Unit in Health and Medical Care: A Social-Behavioural Overview," *Social Science and Medicine* 8 (1974):495-519.

108 John K. Galbraith, *Economics and the Public Purpose* (Boston: Houghton-Mifflin, 1973), pp. 30-31.

109 See, for example, Margrit Eichler, *The Double Standard: A Feminist Critique of Feminist Social Science* (London: Croom Helm, 1980); and Eichler, *Sexism in Research and Its Policy Implications* (Ottawa: Canadian Research Institute for the Advancement of Women, August 1983).

110 *An Act to Amend the Indian Act*, Bill C-47, House of Commons, June 29, 1984.

111 *An Act to Amend the Indian Act*.

112 For example, between 1966 and 1982, the female labour force grew by 119.4 per cent, while the male labour force grew by 39.6 per cent. Royal Commission on Equality in Employment, *Report* (Ottawa: Supply and Services Canada, October 1984), p. 56.

113 Since 1968 there has been a dramatic and continuing increase in single parenthood, especially among young women. By 1981, the percentage of all families headed by a single parent had grown to 11 per cent, an increase of over 2 per cent from 1976. The number of children in single-parent families has increased at the same rate. Fran Klowdawsky, Aron Spector, and Catrina Hendrix, *Housing and Single Parents: An Overview of the Literature*, Centre for Urban and Community Studies (Toronto: University of Toronto, January 1984). In over half of all husband-wife families in Canada, both spouses are in the paid labour force. In 1981, 61 per cent of the total number of families in Canada would have been living below the poverty line had women not been earning an income. Canadian Advisory Council on the Status of Women, "Women and Work," fact sheet, Ottawa, 1985.

114 See, for example, Monica Boyd, *Canadian Attitudes toward Women: Thirty Years of Change*, Women's Bureau, Labour Canada (Ottawa: Supply and Services Canada, 1984); and Boyd, "Linguistic Background Affects Attitudes on Equality of the Sexes: University of Ottawa Study," *The Citizen*, April 14, 1984, p. 19.

115 Susan Shaw, "The Sexual Division of Leisure: The Meanings, Perceptions and the Distribution of Time," Ph.D. dissertation, Carleton University, Ottawa, 1982.

116 The Social Sciences and Humanities Research Council provided financial assistance in convening the following conference and for publishing its proceedings: The Institute for Social and Economic Research, "Women and Work," proceedings of a Conference on Data Requirements to Support Research into Women and the Canadian Economy, December 9-10, 1982.

APPENDIX A

1 According to the census definition, "household" and "dwelling" mean the same thing as far as sample selection is concerned. The relationship is one to one.

2 For further information on this subject, see Statistics Canada, *Summary Guide: Total Population*, Cat. 99-902, Section 3.3, 1983.

3 CANSIM is the acronym for Canadian Socio-Economic Information Management System. Its services are described in this appendix.

4 This specialized consultation service is available for all data sources for which special user tabulations are offered. It will not be noted for the other sources and surveys mentioned in this appendix.

5 For more detailed information on sampling and related topics, see Statistics Canada, *Methodology of Canadian Labour Force Survey*, Cat. 71-526, 1976, as well as *Guide to Labour Force Survey Data*, Cat. 71-528, 1979.

6 See Statistics Canada, *The Labour Force*, Cat. 71-001, monthly, which includes charts and tables on economic regions.

7 The difference between these two family definitions is that the census family is restricted to a husband-wife relationship (with or without unmarried children) or a single-parent family. The economic family, on the other hand, refers to a group of people living together in the same dwelling, related by blood, marriage, or adoption.

8 The term "spending unit" used in this survey differs somewhat from the terms "household," "family," and "individual" used in other surveys. See Statistics Canada, "Notes and Definitions," *Family Expenditure in Canada*, Cat. 62-551, Volume III, 1982.

9 For a more complete discussion of the comparability of data from two different sources, see Statistics Canada, *1981 Census Dictionary*, Cat. 99-901, 1984, Appendix B-2. Another publication by Statistics Canada, *Guide to Federal Government Labour Statistics*, Cat. 72-512, Part IV, 1979, discusses the reconciliation of data from Statistics Canada's establishment and labour force surveys with census data (1971 and 1976).

10 For a precise definition of family head, see Statistics Canada, "Notes and Definitions," *Income Distributions by Size in Canada*, Cat. 13-207, 1984, p. 21.

Program of the Colloquium on the Economic Status of Women in the Labour Market

Montreal, Quebec
November 26-28, 1984

Monday, November 26

Opening Remarks

David W. Slater
Chairman
Economic Council of Canada
Ottawa

The Changing Economic Status of the Female Labour Force in Canada

Speaker and Colloquium Co-Chairperson

Jeannine David-McNeil
Professor
École des hautes études commerciales
Montreal

Daycare and Public Policy

Chairperson

Diane Bellemare
Professor
Department of Economics
Université du Québec à Montréal
Montreal

Member, Economic Council of Canada

Speaker

Michael Krashinsky
Associate Dean
Scarborough Campus
University of Toronto
Toronto

Discussant

Nicole Boily
Coordinator
Community Services
Université du Québec à Montréal
Montreal

A National System for Parental Leave

Chairperson

Davida Stewart
Professor
School of Business and Applied Arts
Holland College
Charlottetown

Speaker

Monica Townson
Consultant
Ottawa

Discussant

Peter Hicks
Director General
Policy and Program Analysis
Strategic Policy and Planning
Employment and Immigration Canada
Ottawa

Occupational Diversification of Women in the Workplace

Chairperson

Micheline Bouchard
Commercial Delegate
Hydro Quebec
Montreal

Speaker

Jac-André Boulet
Senior Economist
Economic Council of Canada
Ottawa

Discussant

Roslyn Kunin
Regional Manager
Economic Services Branch
Employment and Immigration Canada
Vancouver

Women and Education: Branching Out

Chairperson

Gerald V. Schuler
Chief Executive Officer
Co-operative College of Canada
Saskatoon

Member, Economic Council of Canada

Speaker

Jane Gaskell
Professor
Faculty of Education
University of British Columbia
Vancouver

Discussant

Madeleine Delaney-LeBlanc
Chairperson
New Brunswick Advisory Council on the Status of Women
Moncton

Tuesday, November 27

Equal-Pay Policy

Chairperson

Paul-Émilien Dalpé
St. Jérôme

Member, Economic Council of Canada

Speaker

Roberta Edgecombe Robb
Professor
Department of Economics
Brock University
St. Catharines

Discussant

Francine Fournier
President
Quebec Human Rights Commission
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Fringe Benefits and the Female Workforce

Chairperson

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Discussant

Christine A. Fagan
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Technological Change: Bad or Good?

Chairperson

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Panel Discussion on Technological Change

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Women and Equality

Speaker

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Recent Commissioner
Commission of Inquiry on Equality in Employment

Wednesday, November 28

Directions for Future Research

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Summary of Proceedings

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Closing Remarks

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